Dr Kate Walker (corresponding author), Northampton Healthcare NHS Foundation Trust, Innovation and Research Department, Berrywood Hospital, Northampton. NN5 6UD

Email: Kate.Walker@nhft.nhs.uk

ORCiDs: 0000-0002-9796-2200

Twitter: @DrKWalker

Dr Chris Griffith, Northampton Healthcare NHS Foundation Trust

Email: Chris.Griffiths@nhft.nhs.uk

ORCiDs: 0000-0002-6377-907X

Dr Jen Yates, University of Nottingham

Email: jennifer.yates@nottingham.ac.uk

ORCiDs: 000-0001-9451-1175

Twitter: @jenniferayates

Prof Birgit Völlm, University Hospital of Rostock

Email: Birgit.Voellm@med.uni-rostock.de

ORCiDs: 0000-0003-4571-3410

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Service provision for older forensic mental health patients: A scoping review of the literature

Older forensic psychiatric patients (defined as aged 50 or over) have complex needs and require specialized treatment to enable recovery and reduce risk. Little is known about what service provision is available for this population, so a scoping literature review was undertaken to establish the extent of service provision and if services are specifically modified or designed for this population. The literature was searched through academic journal databases and Google Scholar, and outputs were screened for suitability and assessed for quality. Eight studies (four qualitative, four quantitative) were included in the review. Studies were mixed in terms of methodological quality, and with several limitations. Qualitative data provided perceptions regarding positive (e.g., sufficient types of therapy) and negative (e.g. lack of age-appropriate services) aspects of interventions. Quantitative data was descriptive, focusing mainly on identifying provision available (e.g., art therapy, violence reduction) and where needs were not being met (e.g., physical needs, education). Results indicate little provision in place adapted specifically for older forensic psychiatric patients. Findings highlight the need for further research to understand and effectively implement interventions and service provision for older forensic mental health patients to ensure practice is evidence based.

Keywords: forensic mental health, older patients, interventions, service provision

Introduction

The world's population is aging, and governments need to design innovative policies and public services specifically targeted to older persons, including policies addressing health care (United Nations, Department of Economic and Social Affairs, Population Division, 2019). This aging population means a growth in older people requiring mental health support, including forensic mental health service provision. In the UK and other Western countries around 20% of secure patients are over 50 (Di Lorito et al., 2017;Völlm et al., 2017; Di Lorito, Dening, & Völlm, 2018), and this proportion is likely to grow as people live longer (Coid, Fazel, & Kahtan, 2002; Di Lorito, Völlm, & Dening, 2019; Lewis, Fields, & Rainey, 2006). Due to common histories that include poor health management and substance abuse, many people with long term mental health disorders also experience the challenges associated with old age earlier and have significantly reduced life expectancy (15-20 years) (Chesney, Goodwin, & Fazel, 2014). It is necessary that there is adequate and appropriate service provision for this population.

Over the past 20 years there has been an increase in demand for forensic mental health services across many countries, a trend that comes at significant human resource and economic cost (Jansman-Hart, Seto, Crocker, Nicholls, & Côté, 2011). Forensic mental health patients, defined broadly as those who are 'both mentally disordered and whose behavior has led, or could lead to offending' (Mullen, 2000, p. 307), sit in a complex intersection of health, social care, and criminal justice systems. Specific service provisions are required for forensic mental health patients, including secure hospital units (low, medium and high security) and community services. Mental health services need an integrated approach, combining geriatric old age psychiatry and generic forensic psychiatry services, as older offenders with mental health difficulties

sit within criminal justice, forensic psychiatry and psychology, and old age psychiatric services (Curtice, Parker, Wismayer, & Tomison, 2003), which as stand-alone services and not integrated ones, struggle to manage this group of patients (Shah, 2006).

Forensic psychiatric patients present with unique mental, physical and social care needs, and these are likely to differ from younger patients due to ageing related factors (Di Lorito, Völlm, & Dening, 2019). Entrenched mental illness is a feature for older patients, and they are more likely to be diagnosed with more serious mental illnesses compared to younger offenders (Fazel & Grann 2002). It has been found that psychotic illnesses including schizophrenia, schizotypal, delusional disorder and personality disorder are prevalent in older forensic adults (Yorston & Taylor, 2009), as are dementia and Alzheimer's (Paradis, Broner, Maher, & O'Rourke, 2000). Many older forensic adults experience comorbid mental health, substance use issues and have histories of trauma (e.g. childhood neglect and abuse, violence) (Haugebrook, Zgoba, Maschi, Morgen, & Brown, 2010; Maschi, Morgen, Zgoba, Courtney, & Ristow, 2011). Older forensic psychiatric patients are also more likely to present with increased rates of co-morbid physical health issues such as sensory impairment (hearing and eyesight) (Lightbody, Gow, & Gibb, 2010), cardiac disease, hypertension and diabetes (Paradis et al., 2000), as well as mobility problems and issues (Coid et al., 2002). Older patients experience longer, more severe and/or interrupted episodes of care, all of which impact their presentation, needs and care requirements. These factors mean that the population of older forensic patients are likely to require more and different specialist interventions, activities, treatment and support than those required by younger patients; and so it is important to establish how well current evidence indicates their requirements are being met.

The placement of older mentally disordered offenders is particularly difficult (Coid et al., 2002), as such services tend to be offered sporadically and in a fragmented fashion, leading to calls for specialist, tailored and age-appropriate service provision for this population (De Smet et al., 2015; Natarajan & Mulvana, 2017; Shah, 2008; Yorston & Taylor, 2006). The rehabilitation of forensic mental health patients should not only focus on reduction of risk, but also targeting how individuals can lead fulfilling lives within the environments they find themselves in. Theoretically, this is aligned with the Good Lives Model (GLM: Ward & Brown, 2004; Ward, Yates, & Willis, 2012), which augments the risk, need, and responsivity principles of effective intervention but emphasises the requirement of individuals to develop and implement meaningful life plans incompatible with future offending.

There is a lack of research informing needs of and services for older adult forensic patients in the last ten years (Di Lorito, Völlm, & Dening, 2019). Where there has been research into intervention provision, this is generally within the jail/prison context and not always specific to mental health. A systematic review by Canada, Barrenger, Robison, Washington, and Mills (2019), examined interventions designed to improve the health or mental health of older adults living in jail or prison, and the effects of the interventions on inmates' physical or mental health. They identified seven relevant papers, but these only captured five unique interventions, some of which are potentially relevant for forensic mental health inpatients based on the target of the interventions and their structure and design. *BE-ACTIV* (Behavioural Activities intervention for depression) and *TRU-GRIT* (structured living programme) offer positive activities, therapy sessions, and self-help groups to increase physical, mental and spiritual health in secure settings. *Art Expression* and *Good Vibe* introduce creative therapies, art, and music to help individuals cope with trauma (*Art Expression*), manage

emotion and improve communication and social skills (*Good Vibe*). This is of potential relevance to the inpatient population and includes activities routinely delivered in secure settings. The fifth, OHSCAP (Older prisoner Health and Social Care Assessment and Plan) , is a health/social care assessment and care planning process to better identify and manage older prisoners' needs (Walsh, Forsyth, Senior, O'Hara, & Shaw, 2014). As such this would need to be adapted and tested for its suitability for forensic mental health and in secure hospital setting.

Although these therapies are potentially of relevance to older forensic inpatients in relation to intervention target, content and structure, a key challenge found in the review of these interventions in prisons was that, due to the lack of evidence (e.g., the absence of RCTs), control group comparisons, or measures of change overtime it was not possible to assess intervention efficacy (Canada et al., 2019). The authors also found in their review that this small pool of studies mainly relied on anecdotes and qualitative methods and the few statistical analyses undertaken could not be synthesised. This therefore limits the generalisability. They concluded the knowledge base in this area needs building, perhaps through empirically adapting interventions that have worked for older adults in the community, followed by testing in correctional services. The focus of this paper's review will establish what is available specifically for older forensic mental health patients in secure units and the community.

Older forensic patients have been described as ignored, misunderstood, and poorly served (Yorston, 1999). There is a clear need for forensic mental health services for older people, as the epidemiology, criminological and clinical characteristics of older people are sufficiently different to their younger counterparts (Natarajan & Mulvana, 2017). Research has suggested that for older adults with serious mental illness, interventions need adapting and developing to be more individually-based to

meet specific requirements (Forsman, Nordmyr, & Wahlbeck, 2011). However, there is no clear understanding of what provision is currently provided that is specifically for older forensic mental health patients, what is missing and if this is appropriate and suitable for this population. This understanding is valuable to patients, clinicians, commissioners, The National Institute for Health and Care Excellence (NICE) and policy makers and ultimately for being able to establish intervention effectiveness. Therefore, the aim of this review is to assess what service provision for older forensic mental health patients is currently offered, specifically addressing the research question: What interventions and therapies have been designed for older forensic mental health patients, residing as inpatients in secure hospitals or in the community?

Method

Based on the research question, study inclusion and exclusion criteria were developed to identify older adults (age $\geq$ 50 years), forensic mental health patients (inpatients [low, medium or high security] or in the community), who had experienced intervention provision. Inclusion criteria comprised: i) the article described an intervention; (ii) the intervention was for patients in a secure mental health unit or the community; (iii) the population were forensic mental health patients; (iv) the population were age $\geq$ 50 years (male or female); and v) articles were written in English. Exclusion included: i) articles with no intervention provision identified; (ii) prison populations, offenders awaiting sentence, prisoners held in temporary incarceration; (iii) studies on general mental health populations; iv) the population were age < 50 years and/or all age ranges were examined as one group; and v) articles not written in English.

Search Strategy

Initially a search of academic databases was completed. Table 1, presents the terms and databases used for this initial search.

[Table 1 about here]

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Where available a thesaurus search was used for the target and the intervention using the terms psychiatry and psychotherapy. A further search strategy was then implemented, using the search terms [6-8] AND [10-12], but with age limits applied as a filter to the searches. See Table 1 for the appropriate filters utilized for each database search.

To extend the reach, Google scholar was searched, using the following terms (older OR elderly) AND ("forensic mental health" OR "forensic patient") AND (intervention OR treatment OR therapy). This search returned 8900 articles, and so the first 300 were screened as recommended by Haddaway, Colllins, Coughlin, and Kirk (2015).

Finally a hand search of the references was also implemented, and potentially relevant articles were identified, located and screened.

Articles were selected following a multi-step process as advocated by Moher, Liberati, Tetzlaff, and Altman (2009) in their guidelines for conducting and reporting systematic reviews. Figure 1 outlines the process followed.

[Insert Figure 1 about here]

Initially, manuscripts identified through database searches and Google Scholar were exported to RefWorks, where duplicates were removed. Titles and abstracts were reviewed simultaneously. When titles were assessed articles were retained if: (1) the title implied there was an intervention; (2) the population were forensic mental health; (3) the population were identified as older/ageing; (4) it was unclear based solely on the title if the article was relevant or not; and (5) more information was required from an abstract read to determine if inclusion/exclusion criteria had been met. Following a review of the abstracts, articles were retained if: (1) the abstract included information that suggested the inclusion criteria had been met; and (2) it was still unclear if the

study was relevant for the review or not. Finally, full texts were read and reviewed, and relevant articles were identified and selected.

Analysis

Quality of empirical papers was assessed using the Mixed Methods Appraisal Tool (MMAT) Version 2018 (Hong et al., 2018). The MMAT is used to provide a detailed presentation of the ratings of each criterion that it assesses and not an overall score by each article (Hong et al., 2018). For all the qualitative articles, the qualitative approach was appropriate to answer the research questions posed. The methods used across all the studies were adequate in regard to the method of data collection (e.g., in depth interviews and/or group interviews, and/or observations) and the form of the data (e.g., tape recording, and/or field notes). Three studies were solely reliant on one form, e.g., interviews (De Smet et al., 2015; Di Lorito, Dening, & Völlm, 2018) or focus groups (Di Lorito, Dening, & Völlm, 2019), although Visser, MacInnes, Parrott, and Hoube (2019) utilized observational field-notes alongside interview data. All of the qualitative articles commented on the use of multiple coders for the data analysis for accuracy; however, only one (De Smet at al., 2015) formally assessed and reported inter-rater reliability, finding a Cohen's kappa score of 0.72 and a degree of agreement of 97.2%, which is considered as substantial. Based on the methodologies used the findings were adequately derived from the data, although it was unclear across the studies the epistemological position taken, and some of the studies (e.g. Di Lorito, Dening, & Völlm, 2019) lacked information about the process of analysis, making it difficult to make a judgement about this criterion. However, across all studies the participant quotes utilized supported the themes well.

The quantitative papers were descriptive and relevant analysis not always the main focus of the research. Of the articles, Di Lorito, Völlm, and Dening's (2019) paper

was the strongest of those reviewed in relation to the MMAT criteria. In the case of the other three, very little information was given about the methodological approach taken. For all the papers the sampling was adequate (non-probability), although probability sampling would have strengthened the research, and there was limited information about sampling particularly in three of the articles (Das, Murray, Driscoll, & Nimmagadda 2011; Das, Murray, Driscoll, & Nimmagadda 2012; Shah 2006). It is not apparent across all of the papers if the sample were representative of the target population, as there is no clear description of the target population or of the sample, such as respective sizes, inclusion and exclusion criteria and reasons why certain eligible individuals chose not to participate. The measures and psychometrics selected were appropriate across the articles, although there is no reporting of validity or reliability tests, neither those associated with the measures generally nor those measured specifically for the samples in the four papers. Information about response bias was sparse and therefore it was difficult to assess the quality of this within the papers. Analysis was described in the work by Di Lorito, Völlm, and Dening (2019), but there was inadequate detail in the other three papers to make a full assessment regarding this criterion.

Results

Following review of 176 full text articles, 8 studies were identified as relevant to include. The articles found and included are described and summarized in Table 2.

[Insert table 2 about here]

It is apparent there is a dearth of research that has examined service provision for forensic mental health patients aged 50 and above who are inpatients or in the community, so the findings offer only a limited insight into the phenomenon. The majority of the articles were deemed not relevant because they either did not focus on

older populations or did not include forensic mental health service users. Findings from a synthesis of the qualitative research will be presented first, followed by an examination of quantitative research.

Qualitative Research

Due to the fragmented nature of the research and lack of data, synthesis of the qualitative research only enabled the identification of two broad themes to encapsulate the key observations: '*positive perceptions of service provision*' and '*negative perceptions of service provision*'.

Positive perceptions of service provision. De Smet et al. (2015) undertook a qualitative study, interviewing eight older (age range 61-72 years) mentally ill offenders (OMIOs) across three different settings (institutionalize care, community care, penitentiary setting), and this afforded comparisons between the settings. Part of the analysis included counts of text fragments, coded as positive or negative. For penitentiary settings, 35 positive experiences (e.g., opportunity to participate in leisure and sport activities) were identified; for institutional care this was 6 positive experiences (e.g., sufficient types of therapy); and for home the count was 24 positive experiences (good experience with domiciliary follow-up). The most positive experiences were found in the home; with the authors surmising this could be because in this environment individuals are able to undertake valuable activities such as voluntary and paid work, and potentially these OMIOs have more freedom to make personal choices.

The phenomenological analysis of the interviews with the patients in the community found service users were positive about the activities offered in community-based care. They emphasized interventions were sufficient and useful, specifically voluntary and paid work, sports, cooking activities and psycho-educational initiatives.

As part of this domiciliary psychiatric follow-up was deemed a very important source of support. A strong preference emerged from their data for psychosocial intervention encapsulating human interaction, communication and psychosocial support.

Based on research with 15 service users (in high, medium and low secure units), examining educational/recreational interventions for older forensic mental health patients, Di Lorito et al. (2018) found some elements of their narratives were positive. Feedback suggested interventions prepared them well for return to the community, activities were relaxing and soothing, they provided a social role and the activity program was suitable for any age group.The few activities specifically for the over 50s found in secure units were well received and it was suggested more should be implemented. Similarly Visser et al. (2019), based on a thematic analysis of interview data and observational notes from service users (11 males, 4 women) aged 50-71 and over (residing in low and medium secure units), identified the theme of '*Participation in activities*', where it was observed weekly routine activities were important, as was the occupational therapy program. They found most activities provided in the unit were age inclusive, although some attracted predominantly younger participants; however, it was not disclosed why this was the case.

Finally, a factor identified in the review as a positive from the research by Di Lorito et al. (2018) related to physical health conditions. From service users' perspectives it was felt these were addressed well (from a medical point of view), and perhaps better than would be in the community, with access to consultations widely available. However, this was not mirrored across all studies as, beyond medical intervention, not all service users felt their physical needs were addressed or catered for (e.g., Visser et al., 2019).

Negative perceptions of service provision. Analysis undertaken by De-Smet et al. (2015) included counts of text fragments, coded as positive or negative. It was found in penitentiary settings 28 negative experiences (e.g., poor psychological support) were identified, for institutional care this was 19 negative experiences (e.g., lack of psychological and psychiatric support) and for home the count was 8 negative experiences (e.g., too much spare time). Contrary to authors' predications, the highest number of negative experiences was found in intuitional care over that of penitentiary, although it is not clear why this was the case. It could be postulated this is a sampling bias, as only a small number of participants were interviewed.

Phenomenological analysis of the narratives by De Smet at al. (2015) revealed those who experienced institutional care disclosed negative experiences relating to therapeutic and occupational activities; namely: there was a lack of psychological and psychiatric support available, there were not enough activities, support was missing in relation to restraining from alcohol abuse, service users experienced boredom, interventions were not deemed therapeutic, interventions provided were not useful, some therapies were age inappropriate, and some interventions were perceived as 'childish'. Likewise, participants under community care noted creative therapies and some other forms of interventions were deemed as too childish, with some participants reporting boredom with their compulsory psychiatric day care.

Negative perceptions were also found by Di Lorito et al. (2018) based on their interviews with 15 service users across three secure settings. Similar to De Smet et al.'s (2015) findings for some longer-term patients, it was felt interventions became repetitive; individuals became bored and lacked enthusiasm and motivation to engage. Likewise, Visser et al. (2019) reported similar findings from those over 50 in secure settings: longer-term patients identified boredom and a lack of motivation to engage

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with interventions. They also noted secure units did not offer age-specific forensic services, a gap in service provision for this population.

Di Lorito, Dening and Völlm (2019) examined the views of members of staff who had worked with older patients in forensic settings with an aim of establishing how well services met the needs of this population. Data were collected through focus group research with different members of staff, e.g., nurses, consultant psychiatrists, occupational therapists (across high and low security units). One of the themes found was *'Addressing patients' needs',* which encapsulated views about barriers to addressing needs and service provision and improvement. In relation to interventions, a barrier and negative factor identified was an ability to offer activities suitable for older patients, particularly for longer stay patients who lacked stimulation, a finding mirrored in service user's views (e.g., De Smet et al., 2015; Di Lorito et al., 2018; Visser et al., 2019). In addition, it was suggested a lack of available resource - financial and staffing - meant specific interventions for older people were neglected and unlikely to be implemented.

Another negative perception found related to physical health, which becomes more problematic as people age. Visser et al. (2019) highlighted that some of the older patients were unable to attend certain interventions because their physical health prevented them from doing so. The majority of their participants had extensive physical health issues and staff intervention in relation to this was generally inadequate (although positive when intervention was with primary care practitioners). Along a similar line, Di Lorito et al. (2018) found some participants reported issues with inaccessibility for some interventions due to mobility problems that come with aging and poorer physical health. Whilst physical activity was seen as positive, it was noted gym equipment was not always suitable for older patients, i.e., weights were too heavy.

In summary, patients and staff presented both positive and negative perceptions about the service provision for older forensic mental health patients, although some of the findings were contradictory across studies. Positive narrative related to quality, type and suitability of activities available in both secure settings and the community, specific provisions for those over 50, psychosocial services, and medical treatment for physical health issues. However, negative perceptions included narratives about: (i) boredom with and uselessness of interventions; (ii) inappropriate therapies/lack of age-appropriate interventions; (iii) poor quality of psychological support; and (iv) lack of provision for those with poorer physical health.

Quantitative Research

Quantitative research was sparse and less comprehensive than the qualitative research identified. Only a handful of studies present elements of data regarding this, and generally this was descriptive and not the main focus of the research. No research has been undertaken that has specifically collating an evidence base for service provision and intervention development or delivery or evaluations of interventions for this age group. Due to the fragmented nature of the research found, it is not possible to synthesize findings, so each article and main findings are presented separately.

Di Lorito, Völlm, and Dening (2019) undertook some quantitative analysis, and although the main analysis focused on characteristics, a small part examined the types of interventions older forensic mental health patients receive in low, medium and high secure settings. The total study sample was 93, however, the analysis that examined interventions comprised a subsample of 41 patients (44% of the total population aged $\geq$ 50 years), of whom only three were female. The authors reported descriptive data on how many participants had experienced different types of interventions, finding skills development, $n = 30$ (72.2%); mental health awareness/psychoeducation, $n = 12$

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(29.3%); art therapy, $n = 8$ (19.5%); healthy life-style training, $n = 8$ (19.5%);

dialectical behavior therapy, $n = 7$ (17.1%); substance misuse treatment, $n = 7$

(17.1%); music/dance therapy, $n = 6$ (14.6%); violence reduction $n = 6$ (14.6%); and

preparation for therapy/motivational work, $n = 6$ (14.6%). Results also revealed their

needs were met in 12 areas of daily living on average (SD 3.5), with one of these

including 'treatment' ($n = 30$; 74%). However, 4 areas of needs were unmet, on average

(SD 3.0) and one of these was 'daytime activities' ($n = 14$; 34%). Patients were split in

to two subgroups: < 55 years old ($n = 20$) and ≥ 50 years ($n = 21$), and it was found

those below 55 years had significantly more unmet needs than those above although this

was not examined by individual categories.

This research offers some descriptives of, and a contextual understanding into,

the types of interventions offered and experienced by those over 50. Beyond this, the

data doesn't offer any further information on this, such as how appropriate/suitable

interventions were, or about engagement, completion, or outcomes. However, this was

not the main aim focus of this part of the study. This research allows a basic insight into

what is being experienced, although the data collected doesn't support generalizability

of findings.

Shah (2006) undertook an exploratory audit examining demographic, clinical

features, management advice and appropriateness of referrals to a consultation-only old

age psychiatry liaison service for inpatients in medium and high secure forensic units.

The consultant had one dedicated session per week for older patients (defined as 60

years and over and younger patients with dementia). The age range of the participants

was 58-87 and comprised 10 males and 1 female. Basic descriptive data were used, and

part of the audit involved noting the amount and different types of intervention advice

given. The intervention advice included medical (drugs and medication, scans, x-rays

and investigative procedures) but also referral for psychological interventions, speech therapy, occupational therapy, and placement advice. It was found advice was required regarding placements for patients outside the secure setting, as it was felt these settings were deemed inappropriate for older patients. It was suggested there is a paucity of facilities that are able and/or willing to accept older forensic mental health patients. Generally, the reluctance to offer support and accept referral of these patients was because of their forensic histories. It was proposed that referring teams were not actually aware of specialist types of facilities available specifically for older forensic mental health patients and there was a need to establish a range of facilities that would accept these patients.

Das and colleagues, in two commentaries, compared healthcare and placement needs of older forensic mental health patients in high security settings with those in medium/low secure settings (Das et al., 2011), and healthcare and placement needs of older forensic mental health patients with a younger forensic psychiatric population (Das et al., 2012). In the first study (Das et al., 2011), patients over 60 (15 from high security, 15 for medium/low security) were examined using the Camberwell Assessment of Needs in the Elderly – Short Version (CANE-S; Orrell & Hancock, 2004), the Camberwell Assessment of Need – Forensic Short (CANFOR-S; Thomas et al., 2003) and forensic adaptation of the Nottingham Acute Bed Study questionnaire (NABUS; Beck et al., 1997). The authors concluded there were significantly different healthcare and placement needs between those older patients in high security and those in medium/low. Although the older patients in the high secure units were relatively younger (61.5 years) than those in the medium/low (73.4 years) they had more physical health problems that required treatment. In addition, the high secure patients expressed more unmet needs in relation to healthcare, psychological distress and basic education

and treatment. Finally, in relation to placement needs half of the older forensic patients in the high secure setting were deemed as not requiring continued high secure placements, but other placements.

In their second study (Das et al., 2012) 26 younger males (45 years and below) and 30 older males (60 years and above), were compared. Two questionnaires (CANFOR-S; Thomas et al., 2003; CANE-S; Orrell & Hancock, 2004) were used for the older patients, with only the CANFOR-S for the younger (CANES-S is assessment of needs for elderly hence not suitable for younger group). In relation to placement issues, it was found there is a lack of low secure facilities willing to look after the needs of older offenders and manage the risks. The younger group rated alcohol misuse and drug misuse needs as met compared to the older group (with met indicating the person has difficulties in this domain and effective help/intervention is being received). A third of the older group rated their treatment as an unmet need (with unmet indicating the person has difficulties in this domain and the patient either receives no intervention or intervention that does not help). Based on the CANFOR-S more of the younger patients had unmet needs for daytime activity and education compared to older patients. However, this was as rated by staff and not patients. Overall, when total needs were compared, significantly more younger patients had met needs than the older patients. There was a significant unmet need for the older patients was in relation to their physical needs, and it was suggested these are complex and may change over time and so careful consideration about these factors is required when planning intervention, placement and care.

Overall, the quantitative evidence found is only descriptive data in nature, from small numbers of participants. The evidence presented is therefore not strong and robust. As such this provides evidence there are large gaps in the literature and our

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knowledge base about service provision for older forensic mental health patients in secure units and the community.

Limitations

In relation to the qualitative research presented, the data analysis offers the opportunity to gather rich data and achieve an in-depth insight into a phenomenon. However, it comes with limitations. De Smet et al. (2015) acknowledge their findings are drawn from a small sample and so are not conclusive. In addition to this acknowledgement, the sample was also diluted further by comparing three different sites and through drop-out and selection bias. Likewise findings from the other studies need to be viewed as preliminary and contextualized within limitations including confirmation bias (Di Lorito, Dening, & Völlm, 2019), sampling bias (for example, specifically there was only 54% participation rate achieved by Visser et al., 2019), and lack of representation (range of professionals' views captured, lack of female service users, different ethnicities and/or range of different units/trusts). It could be argued those who declined, dropped out or were unable to take part in the research are perhaps more important to understand. For example, those not captured by Visser et al. (2015) were identified as more withdrawn from activities and who spent more time in their room and their narratives about this would have likely given a very different viewpoint and insight in comparison to those included in the study. This would suggest the scope of this type of research needs widening, to involve a more diverse sample and examine the context within which they reside.

As a general observation, no research had explicitly quantitatively examined interventions for older mental health forensic patients, either in relation to evaluations, intervention design and development or outcome studies. Of the studies that examined interventions in some form, the findings were descriptive rather than detailed statistical

analysis of the data. The results expose some of the different interventions experienced by older forensic mental health patients, with no research examining the effectiveness or appropriateness of the interventions. The studies comprised relatively small samples i.e., n = 41 (Di Lorito, Völlm, & Dening, 2019), n = 11 (Shah, 2006), n = 30 (Das et al., 2011, 2012), which limits the statistical analysis, and does not afford generalizability. Both Shah (2006) and Das et al. (2011, 2012) were more reliant on information from clinicians and staff rather than service users. In addition, limited detail is given on the analysis undertaken and the actual results found, meaning it is not always transparent as to how they drew their conclusions.

Conclusions and Implications

It is apparent there is a lack of research that has examined interventions for older forensic mental health patients, in secure units or the community, and so our understanding of the types and efficacy of interventions for this population is lacking. Taken together, the studies were heavily reliant on qualitative methods limiting the scope and generalizability of the findings. None of the quantitative studies reported any analyses that could be synthesised across studies.

It was found, based on both the qualitative and quantitative research, there was a wide range of intervention and activities available. However, there was little detail into the specifics of the interventions, and it would appear that there are very few interventions specifically designed for older forensic mental health patients and none that have been evaluated. It is therefore not clear if they are effective, helpful or suitable for the older patients. From the qualitative research, a common thread across the articles was both patients and staff felt some interventions were not age-appropriate, some may be inaccessible mainly due to physical health of older patients, and for the longer-term patients, interventions became repetitive and boring and so motivation for

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and engagement was poor. It was suggested this was the case regardless of place of residence (De Smet et al., 2015). Of interest, factors such as boredom with and uselessness of interventions and poor quality of psychological support may also be common within younger adult forensic population, although to date there is no qualitative research that has made this comparison.

Another area of consideration in this population is the assessment and management of risk. Older people in secure settings which they share with younger adult patients can be vulnerable. Secure forensic inpatient services could be deemed as unsuitable, and not provide appropriate risk intervention and assessment for older patients identified as being be frail, vulnerable and suffering from co-morbid serious physical illness (Coid, Fazel, & Kahtan, 2002). It has been argued that risks of older patients are not always assessed accurately and are difficult to judge, as assessments used generally rely on younger adults for standardisation, that risk assessments may be biased by societies views that older people are less dangerous, and risk is complicated by cognitive impairment, which can cause risk to increase or decrease as the impairment progresses (Nataranjan and Mulvana, 2017). Assessment and management of risk therefore may take longer, be inaccurate or not be possible due to cognitive decline.

More research is required to understand and identify interventions and service provision for older forensic mental health patients to ensure practice is evidence based. This could be achieved through mixed methodological approaches using qualitative data to generate clearer hypothesis, research questions, theory and evidence-based interventions and quantitative to verify, generalise and evaluate. This needs to incorporate a focus on risk factors as well as resilience and protective factors. In addition, research needs to compare older adult experiences in different settings, step-down care and in the community. Longitudinal research would also be beneficial to

encapsulate changing needs and requirements at different stages of individuals' lives as they experience different settings, contexts and interventions.

Mental health services for older people (not specifically forensic) offer comprehensive, individualised and accessible services, using a multidisciplinary approach. These mental health care and treatment services and interventions can be effective for older people (Burns, Dening and Baldwin, 2001). However, the use of standardised screening instruments in this environment needs to be encouraged and developed, but there is a lack of standardised tools for this population (Nataranjan and Mulvana, 2017). Likewise, research within older prisoner populations, whilst in need of further evaluation for efficacy, highlights interventions that can be implemented with an older forensic population, such as art and music therapy, group and individual counselling, recreational therapy, and intensive assessment (Canada et al. 2019). Forensic mental health services would benefit from the distribution of knowledge in relation to interventions and practices that work in other settings such as prisons and other healthcare settings.

The epidemiology, criminology and clinical characteristics of older people are different from those of younger people (Natarajan & Mulvana, 2017). Consideration needs to be given to the fact that older forensic mental health patients are likely to experience comorbid major physical and mental health issues, substance abuse issues as well as extensive histories of trauma (Maschi, Sufti, & O'Connell 2012). Older forensic mental health experience longer length of illness, more severe and/or interrupted episodes of care (Di Lorito et al., 2018), longer term use of anti-psychotic medication, and older style antipsychotic medications (which can result in adverse effects on motor skills and cognition) (Kristian Hill, Bishop, Palumbo, & Sweeney, 2010), all of which impact their presentation and on their needs and care requirements. Therapies that focus

on social integration, and that acknowledge and consider cognitive functioning (e.g., blending cognitive remediation with rehabilitative interventions) are required (Bartels & Pratt, 2009). For this population, interventions need to integrate health promotion, health care and illness management interventions, and use strategies to integrate psychosocial rehabilitation, including both mental and physical health needs thereby addressing the needs and requirements of the 'whole person' (Musser et al., 2010). In addition, interventions that are not standard in secure settings, such as cognitive stimulation therapy (CST), life-story and reminiscence work, and adapted offence-focused work for those with a mild to moderate dementia, may be appropriate and helpful for older forensic mental health patients (Natarajan & Mulvana, 2017).

Services need to identify older adults at risk of a decline in independence and mental wellbeing and provide tailored physical and social activity programs (NICE 2016) which address their multiple and complex needs (Natarajan and Mulvana, 2017). It is important services fit patients' individual needs (Anderson, 2011) to enable progression, recovery and better levels of health, wellbeing and quality of life. An in-depth understanding is required as to why older patients do not make progress on key outcome measures which assess a broad range of recovery, clinical, social and risk factors to overcome barriers to improving health, recovery and wellbeing. Similarly, it is important to identify and assess unique protective factors for older adults to enable sustainable improved health, wellbeing and quality of life (De Smet et al., 2015). This could be developed within a more positive and strengths-based approach, such as the Good Lives Model, to inform future professional practice and enhance the experience of care and promote a "good" life for those older patients both in secure forensic units or in the community.

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