**Chapter 27: Adults in the prison population**

**Abstract:**

This chapter addresses the (pragmatic) language and communication difficulties of adults who are in prison. While there are no systematic studies of speech, language and communication difficulties in adult prisoners, conditions which are strongly associated with communication difficulties such as dementia, learning difficulties and psychiatric conditions are shown to be prevalent in this population. In addition, low levels of education and literacy difficulties are frequently revealed in studies of adult prison populations. By contrast, there is far better recognition of the communication needs of foreign national prisoners. Many of the communication difficulties that are specific to the prison environment for foreign national prisoners apply equally to a home language speaker who has speech, language or communication difficulties. These difficulties are detrimental to the individual and may also reduce the effectiveness of the prison regime given that most assessment and treatment to prevent re-offending is verbally mediated. Risk assessment relies particularly on effective communication with the prisoner. If communication difficulties prevent full disclosure of risk factors, risk assessment will be of limited value and may affect not only the prison but also staff and other inmates. The chapter highlights many areas where further research into adult offenders is needed and presents a policy agenda to improve health care provision for older prisoners.

**Keywords:** adult prisoners; communication difficulties; health disadvantages; older prisoners; prison statistics; young offenders

**27.1 Introduction**

Rates of incarceration and prison policies vary in the western world. People are imprisoned partly to remove those deemed dangerous to protect others, and partly to punish them for breaking the law. The numbers of people incarcerated have grown significantly in countries such as the United States (US) and the United Kingdom (UK). Against these increased rates of incarceration, re-offending rates remain high. Around 39% of young offenders in the UK re-offend and enter adult prisons (Ministry of Justice 2019). The experience of being in prison is associated with increased physical and healthcare needs. This chapter will examine these needs, with special consideration of the language and communication challenges faced by adults in prison. The discussion will address the social disadvantage that places an individual at risk of incarceration, the developmental and psychiatric disorders that are found in adults in the prison population, and the unique needs of different categories of offenders. It will also highlight the importance of speech and language therapy within the prison setting, and the role of pragmatic language skills in verbally mediated interventions designed to reduce re-offending rates.

**27.2 International incarceration statistics for adults**

Using the World Prison Population List (Walmsley 2018), the US has the highest prisoner rate, with 655 prisoners per 100,000 of the national population. The US is by far the leader among large industrialized nations in terms of the number of people it incarcerates. Russia comes closest at 451 prisoners per 100,000 of population, although there is no available data regarding China’s incarceration rate. The US also has the largest prison population, with roughly 2.2 million people incarcerated in the country in 2014. China’s estimated prison population totalled 1.7 million people that year. Other nations with population sizes comparable to the US have far fewer prisoners.

The [majority of US prisoners in federal correctional facilities are of black or African-American origin](https://www.statista.com/statistics/252850/number-of-prisoners-in-the-us-by-ethnicity/) (US Department of Justice 2018). As of 2011, there were about half a million male and about 26 thousand female black, non-Hispanic prisoners. They made up 40 percent of all incarcerated persons in the US but accounted for only 13 percent of the total US population. [About 237 thousand prisoners in state facilities were sentenced for drug-related offences](https://www.statista.com/statistics/252852/sentenced-prisoners-in-the-us-under-state-jurisdiction-by-offense/), accounting for roughly 17.4 percent of all state prisoners. In the US, drug-related offences, such as trafficking and possession, were the most common cause of imprisonment in state prisons. The next most common causes were crimes such as robbery and murder, at 13.6 and 12.2 percent, respectively.

In other OECD countries rates are lower. Scotland, England and Wales have the highest imprisonment rates in western Europe, with 143 people per 100,000 of population in Scotland and 141 per 100,000 in England and Wales. This compares to only 59 and 51 per 100,000 in prison in Sweden and Finland, respectively (Ministry of Justice 2018a). The prison population in the UK has risen over the last 30 years but has reduced in the last two years. Internationally, analysis shows that there is no link between the prison population and levels of crime (Lappi-Seppälä 2015). Possibly, this may relate to political reasons for imprisonment in different countries, with the US having a focus on protection of the public by removing people who threaten safety, the UK having an equal emphasis on punishment and rehabilitation, and countries with the lowest levels of incarceration focussed more on rehabilitation.

**27.3 Adult prisoners and disadvantage: A UK perspective**

In December 2018, the adult prisoner population in England, Wales and Northern Ireland was 82,384 (HM Prison Service 2018). Taking the adult population in England and Wales as an exemplar, we can examine the characteristics of the prison population. These characteristics are analysed in detail annually in the Bromley Briefings Prison Factfile which are produced annually by the Prison Reform Trust (2017, 2018). Based on the adult prison population in England and Wales in 2012 (Ministry of Justice 2012), we can state that:

* 24% of prisoners were taken into care as a child (31% for women and 27% for men)
* 29% experienced abuse as a child (53% for women and 27% for men)
* 41% observed violence regularly in the home (50% for women and 40% for men)
* 59% regularly truanted from school
* 42% were expelled or permanently excluded from school
* 47% have no educational qualifications
* 68% were unemployed in the four weeks before custody (81% for women and 67% for men)
* 13% have never had a job
* 15% were homeless before entering custody
* 54% have children below the age of 18
* 16% have symptoms indicative of psychosis (25% for women and 15% for men)
* 25% identified as suffering from both anxiety and depression (49% for women and 23% for men)
* 46% of women and 21% of men have attempted suicide
* 64% have used class A drugs
* 22% drank alcohol every day in the four weeks before custody

Thus, it is clear that a very large proportion of the adult prison population have a troubled background with significant markers of disadvantage, including nearly half having no educational qualifications and a high proportion unemployed prior to entering custody.

The re-offending rates suggest that prison is unsuccessful in rehabilitating prisoners. 48% of adult prisoners re-offend within one year of release (Ministry of Justice 2018b). This includes 58% of women, rising to 73% of women with a sentence of less than 12 months and 83% of women who have more than eleven previous convictions (Ministry of Justice 2018c).

Women are a minority within the prison population in England and Wales, accounting for 5% of the adult prison population. The reasons for their offending differ from men and they often have multiple and complex needs (Ministry of Justice 2018d). On 30th November 2018, 3,807 women were in prison in England and Wales. 60% of women were remanded into custody by a magistrate’s court. 41% remanded by a crown court did not receive a custodial sentence. 83% of women committed a non-violent offence, with theft being the most common reason for incarceration. 62% of women received a sentence of less than six months (Ministry of Justice 2018d).

48% of adult prisoners in the UK re-offend so there is a significant proportion of the population revolving in and out of prison. Given the adverse impact of communication difficulties on accessing healthcare and on employment outcomes, we might hypothesise that adult prisoners with communication difficulties are much less likely to benefit from verbally mediated interventions to prevent re-offending and are less likely to gain employment.

**27.4 Young offenders**

Most of the research into offenders with language and communication difficulties has been conducted with young offenders in community settings – see Snow (2019) and Snow and Bryan (2018) for recent reviews. These reviews outline the high proportion of young people in contact with criminal justice services who have speech, language and communication difficulties. In the UK, we must take care not to criminalise automatically such people, as Youth Justice Services take prevention referrals as well as deal with those who have offended. The relatively small amount of research that has been conducted shows that:

* Speech and language therapy services can be delivered effectively in criminal justice settings (Bryan, Freer and Furlong 2007; Snow and Woodward 2017).
* Improvements in language functioning are detectable on standardised tests when speech and language therapy provision is added to the support package available to young people (Gregory and Bryan 2011).
* Staff perceive a benefit to the wider delivery of justice services for young people when they have access to training and support to manage communication difficulties supplied by a speech and language therapist (Bryan and Gregory 2013).

In December 2018, there were 839 young people under the age of eighteen in custody and 924 eighteen years or over in youth custody in the UK (Youth Custody Service 2018). Data from Bryan (2004) suggests that at least 60% of these offenders will have speech, language and communication difficulties that will affect normal everyday functioning, education and engagement in verbally mediated interventions. This would be 1,058 offenders using the December 2018 population. The youth re-offending rate in the UK stands at 39.3% (Ministry of Justice 2019), suggesting that around 415 young offenders with significant speech and language difficulties will enter the adult estate each year. While this is an extrapolation from current figures, it does have resonance with other characteristics of the adult prison population as discussed in section 27.3. Snow (2019) has set out a compelling research agenda for this field. There is a need for significantly more research into the nature of communication difficulties, their impact on the young person’s rehabilitation, and the potential for improved communication to support access to preventative measures such as engagement in education or meaningful work and re-engagement with families.

**27.5 Physical and mental health problems in adult prisoners**

Adults in prison experience a wide array of physical and mental health problems, often at an increased prevalence over the general population. In many of these conditions, language and communication difficulties arise. Although there is a dearth of studies of these difficulties in the adult population, they are well documented in young people who are in custody, especially in relation to mental health, neurodevelopmental disorders, and social and cognitive difficulties (Hughes et al. 2017). There is a further complication in the adult population in that developmental conditions presenting in adults may also be accompanied by conditions associated with ageing. This issue is addressed in section 27.9.

*27.5.1 Physical health problems*

Problems that affect physical health are commonplace in adults in prisons. A study conducted in Italy attempted to assess health conditions of all inmates in six Italian regions. The study captured 92.2% of the adult prison population in these regions and represented 28% of the entire Italian prison population (Voller et al. 2016). A total of 15,751 inmates were enrolled in the study. The mean age was 39.6 years with an age range of 18 to 60 plus. All inmates were examined by a doctor using a standard set of tests based on the Clinical Modification of the International Classification of Diseases (ICD-9-CM) criteria (World Health Organization 2011a). On average, the inmates presented with 2.2 disorders each. 32.5% did not present with any disorders. The most common disorder was psychiatric disorder (41.3%), followed by digestive (14.5%), infectious (11.5%), cardiovascular (11.4%), endocrine, metabolic and immune (8.6%) and respiratory (5.4%) conditions. Diseases of the nervous system accounted for 4% of disorders. The authors commented particularly on the over-representation of chronic diseases associated with lifestyle in a relatively young population (Voller et al. 2016).

*27.5.2 Psychiatric disorders*

Fazel et al. (2016) conducted a systematic review of the prevalence of psychiatric disorders in prisoners worldwide. They note that differences in methods of identification and use of characteristics that are highly correlated to criminogenic factors (such as disregarding norms and rules, low threshold for violence and inability to profit from experience) lead to variations in prevalence figures. However, a systematic review of 33,000 prisoners and over 100 studies showed a consistent finding of one in seven prisoners having a major depression or psychosis (Fazel and Seewald 2012). Another consistent theme is the high rate of substance abuse among prisoners. Butler et al. (2011) showed that there is a high rate of comorbidity between mental illness and substance misuse. Such co-morbidity is detrimental to the prognosis for the individual with a psychiatric disorder and increases the likelihood of re-offending and premature mortality following release (Chang et al. 2015).

Studies also consistently show higher rates of psychiatric disorders, particularly depression and drug dependence in female prisoners (Binswanger et al. 2010). A recent problem is novel psychoactive agents. The Inspectorate of Prisons in England and Wales stated that these substances, particularly synthetic cannabinoids, have led to increased violence in prisons as a direct result of drug intoxication or increased bullying due to drug debts (HM Inspectorate of Prisons 2015). However, reliable detection of these substances is difficult partly due to disincentives to self-report. Longitudinal studies are needed to fully understand whether prisoners bring psychiatric disorders to prison with them, or whether these develop in the prison environment (Fazel et al. 2014).

There are significant adverse outcomes for prisoners from psychiatric disorders. Suicide rates are difficult to validate given variation in methodologies for reporting deaths and reluctance in some cultures to record deaths as self-inflicted. Fazel et al. (2011) showed that in Western Europe, most countries report around 100-150 suicides per 100,000 prisoners, but France is an outlier with 179 per 100,000 (Duthe et a.l 2013). Suicide rates are also lower in the US with 41 per 100,000 in local jails and 16 per 100,100 in state prisons. This lower rate is thought to reflect the high proportion of African American and Hispanic prisoners who have lower suicide rates (Bureau of Justice Statistics 2015). Self-harm is also an adverse outcome of psychiatric problems. Hawton et al. (2014) showed that 5-6% of men and 20-24% of women in prison in England and Wales self-harmed, with risk factors being younger age and short sentences. Guidelines for suicide prevention include early screening of prisoners, actions taken in response to early screening, and on-going risk monitoring (Konrad et al. 2007). Given that screening is likely to be verbally mediated, any prisoner with communication difficulties may not have their level of risk recognised or fully recognised.

Many interventions aimed at improving prisoner mental health have been evaluated but most studies are small scale. In addition, heterogeneity of the prison population and practical difficulties such as obtaining permissions and running interventions over time result in limited research. Barker, Kolves and DeLeo (2014) conducted a systematic review of evidence-based activities and concluded that multi-factored suicide prevention programmes appear more effective. They also suggest that using trained inmates to provide social support and positive staff attitudes towards prisoners may also be influential factors in suicide prevention. There are no studies on the outcomes for prisoners with communication difficulties in relation to such programmes. However, we might hypothesise that if social support is a positive factor in suicide prevention, this will be more difficult to access for prisoners with communication difficulties.

*27.5.3 Prisoners with learning disabilities*

A significant number of adults in prison have intellectual or learning disabilities. Jones and Talbot (2010) showed that adults with intellectual difficulties including learning difficulties or disabilities were over-represented in prison populations, with estimates varying from 20-30% depending on definitions and methodologies for identification. Jones and Talbot also demonstrated that despite the Disability Discrimination Act 2005 in the UK placing a statutory responsibility on public bodies to identify and make reasonable adjustment for the needs of people with disabilities, intellectual disabilities were largely unrecognised in the UK prison system.

Murphy, Gardner and Freeman (2017) systematically screened nearly 3,000 new prisoners entering three category B male prisons in city locations. (Convicted criminals are generally placed in category B prisons if they are not deemed to be the highest level of security threat. However, they are still recognised as being ‘high risk’ and require significant security measures to ensure they do not escape.) The Learning Disability Screening Questionnaire (LDSQ; McKenzie and Paxton 2006) was used. Prison staff with experience of working with people who have intellectual difficulties were trained to administer the LDSQ within 7 days of admission to the prison. Of the 3,778 entering prison, 2,429 were screened. But 396 refused, 216 were non-English speaking and the remainder were unable to give consent or were suffering from serious mental health problems. 169 (or 7%) were identified as having an intellectual disability on the LDSQ. This study demonstrates the feasibility of screening for intellectual disabilities within an adult prison environment. It is important that people with intellectual disabilities are identified because they are known to find it difficult to understand written information such as prison rules and to have difficulty using systems such as booking doctors’ appointments. They are also more likely to be depressed, anxious, and bullied (Talbot 2008).

Although the Bradley Review in 2009 made over 90 recommendations for the care of people with learning disabilities in the criminal justice system in England and Wales (Bradley 2009), including screening for intellectual difficulties, there is still no systematic screening and support for these prisoners.

*27.5.4 Prisoners with deafness*

People with deafness are over-represented in the prison population in both the UK and in the US (Williamson and Grubb 2015). A survey of prisons and young offender institutions in England and Wales identified 135 deaf or hard of hearing prisoners (Gahir et al. 2011). The US Bureau of Justice Statistics stated that 7% of prisoners rising to 13% for over-45s had a severe hearing loss or deafness based on a 2004 survey of inmates (Maruschak 2008). Several studies have also shown increased occurrence of sexual offending amongst deaf offenders (Young et al. 2000). Miller and Vernon (2003) reported the rate of sexual offending by deaf prisoners to be four times the rate of hearing offenders. Williamson and Grubb (2015) conducted a systematic review of the literature on the reasons for this bias. They examined the characteristics of deaf offenders in relation to their personalities, language and brain development. They found a dearth of literature but some evidence for sexual offending linked to sexual abuse experienced by the deaf person in childhood, given that there are increased rates of child sexual abuse in the deaf population (Miller et al. 2005). However, Williamson and Grubb (2015) suggest that it is only when deaf children who have been abused experience further unfortunate circumstances such as social isolation or limited sexual education that they become perpetrators of abuse.

Language barriers were also noted to affect the social and psychological development of deaf adolescents. Vernon and Rich (1997) reported that in a sample of twenty deaf offenders, eighteen could not speak and six had minimal use of sign language, reducing their ability to communicate with others. Deaf people are also noted to experience a higher rate of learning difficulties and disabilities than the hearing population. Vernon and Greenberg (1999) highlight this prevalence and suggest that developmental disorders are linked to a propensity towards use of violence. Young et al. (2001) propose a direct link between developmental disorders and sexual offending. Their study of 204 deaf offenders showed that 84 had communication difficulties that masked an underlying disorder such as Asperger’s syndrome. Research suggests that if these disorders are unrecognised and therefore not managed, they can result in deviant behaviour such as sexual offending (Allen et al. 2008). A large, longitudinal study of children with developmental language difficulties suggests that language difficulties may be associated with sexual offending, although the results are preliminary (Mouridsen and Hauschild 2009). More research is needed to understand fully why deaf people are more likely to commit sexual crimes and to prevent this from happening.

Problems with mental health may also contribute to offending behaviour in deaf individuals. However, the literature is very limited. Also, Williamson and Grubb (2015) note that mental illness is difficult to assess and identify where the deaf individual’s use of sign language, facial expression and alternative ways of communication can be mistaken as a mental impairment, particularly where staff are not experienced signers with knowledge of the deaf community and its culture. A study of deaf people in prison who use sign language to communicate concluded that the needs of this group of offenders are not fully recognised or met (O’Rourke and Grewer 2005). While the mental health needs of this group of prisoners appears to be different from that of the hearing population, more research is needed to understand these needs and the pattern of offending behaviour in deaf individuals in prison (Young, Monteiro and Ridgeway 2000). Hearing impairment is considered further in section 27.10 on older female prisoners.

**27.6 Pragmatic language difficulties in adults in prison**

Prisoners with pragmatic communication difficulties are immediately disadvantaged. Prisons are complex rule-governed institutions with significant restrictions on personal freedom imposed by those rules. Learning the rules and applying the rules requires significant pragmatic language understanding. While assessing language skills in a random sample of prisoners, I had to see one inmate in the segregation unit as he had attempted to smoke in the education unit. He reported checking carefully and there being an absence of ‘no smoking’ signs. He had not understood the implications of the prison being a no smoking establishment with smoking only allowed in certain outdoor areas.

Negotiating relationships with other prisoners and staff is necessary to establish a place within a wing and to build a small network of trusted people who will ‘look out’ for you. This is difficult for someone with speech difficulties, someone who finds it difficult to convey information, or for someone who finds it difficult to understand aspects of communication such as sarcasm, tone of voice, implication or warning.

Processes such as booking a phone call and booking a visit for a friend or family member require completion of official forms. If prisoners need help with such processes, they can be deemed to have a weakness that other prisoners may choose to exploit. This can lead to exploitation or to prisoners opting out of such processes to save face, thus increasing their isolation.

Completing the regular ‘canteen’, which is a regular order of food or personal items that can be ordered using a limited allowance of cash and any earnings from paid employment within the prison, involves completing a complex form. Prisoners with communication or literacy problems often rely on other prisoners to complete this form for them. Asking another prisoner to help can result in a requirement to order something for the helper willingly or otherwise.

Communication difficulties can also lead to staff being unable to ascertain what is troubling a prisoner. I recall a prisoner showing frustration with an officer who was trying to obtain additional phone credit for him as he wanted to call his mother. The officer was aware of the prisoner’s frustration but could not ascertain the cause and asked me to intervene. The prisoner found it difficult to convey factual information and also to express his feelings. Using structured questioning, scaffolding his responses and checking back meaning, slowly revealed that he was grateful for the additional credit and recognised that the officer was trying to help. However, the key issue was that his mother had not answered his calls for over a week and he was concerned that she might be ill. Understanding his concern accurately required time and skills that the officer might not have. Such mis-communications are common in the prison environment and may lead to prisoners lashing out when their needs are not understood. This is referred to as ‘kicking off’ in the prison environment.

Although the adult prison regime provides rehabilitation to prevent re-offending and provision to address issues such as mental health and illegal drug taking, as well as more specialist provision to prevent sex offending, these interventions are all verbally mediated, and most are offered in a group therapy context which makes very significant demands on the person’s language skills (Bryan et al. 2015). As yet, there is no systematic assessment of speech, language and communication difficulties for adult prisoners in the UK, either routinely or before embarking upon a verbally-mediated intervention. There is also almost no access to speech and language therapy services for adult prisoners. This means that where a prisoner is struggling to communicate with staff, there is no support for the prisoner or for the staff to address communication difficulties. Failure of a therapeutic intervention will usually count badly against a prisoner who, for example, does not complete a groupwork intervention. Yet, the influence of communication difficulties is not considered.

The pragmatic language difficulties examined in this section can be most acute in certain prison settings and contexts (e.g. entering prison) and for specific categories of prisoners with particularly challenging needs. The chapter explores these prisoners and their experiences in the following sections.

**27.7 Experience of entering prison**

Entry into prison can be a time when the consequences of poor verbal communication skills can be particularly keenly experienced. Williams et al. (2013) examined prisoners’ subjective experience of early imprisonment. 170 men were interviewed as they entered custody and three weeks later. 75% were re-offenders. 168/170 gave some free narrative about their life, with prompts used if the prisoner appeared to have difficulty in responding. The authors noted that the free narratives of their experiences were often very brief and that this was not a very verbally fluent cohort of men. In addition, the authors noted a bias in that the sample included those willing to take part in an interview. As well as concerns about adverse aspects of imprisonment such as depression, loneliness, missing relatives and friends and worries about personal safety, good relationships with staff and staff who were able to facilitate good relationships between prisoners were perceived as making a life-saving difference. It is possible to speculate from this study that many of the men had a restricted ability to convey information via verbal language, and that those with language difficulties would be less likely to engage positively with staff. Williams et al. (2013) also stated that few prison staff are trained to create a therapeutic milieu in a prison.

**27.8 Foreign national prisoners**

More awareness appears to be given to language issues in foreign nationals who have minimal or no ability to communicate in English. We might hazard a guess that this is because (a) speaking another language is an obvious issue, and (b) finding (and funding) an interpreter is an obvious solution. Sen et al. (2014) showed that the foreign national prisoner (FNP) group within UK prisons has risen rapidly. Ministry of Justice (2018a) state that 11% of the UK prison population are foreign nationals, with 9,047 foreign nationals in prison in the UK in September 2018. The FNP group has a higher incidence of self-harm and suicide (Borrill and Taylor 2009), which is associated with uncertainty about their ongoing fate. Only a quarter of FNPs report that their main language is English (HM Inspectorate of Prisons 2018).

Language difficulties are further exacerbated by recurring problems with the quality of translated materials and interpreting facilities (HM Inspectorate of Prisons 2010). Information packs are unavailable in 31 of the 160 languages within the FNP group, which may exacerbate feelings of social isolation (Barnoux and Wood 2013). Bhui et al. (2009) suggest that communication problems for FNPs may reduce the ability to express mental health issues, reduce access to services, exacerbate difficulties with understanding legal documents, inhibit wider understanding of the environment and context, and enhance feelings of hopelessness and vulnerability. We might also note that these issues would apply to an English-speaking prisoner who has difficulty with communication.

Graf et al. (2013) showed that one in three of male and one in two of female FNPs are clinically depressed. Sen et al. (2014) concluded that diagnosing mental health difficulties in FNPs is problematic and that diagnostic and treatment tools specific to FNPs are needed. They also call for a systematic study into the prevalence of mental health problems in FNPs.

A more recent study of culturally and linguistically diverse women in prison in Australia – where 20% of female prisoners in New South Wales speak a language other than English – showed that limited English proficiency was a barrier to care. The use of fellow prisoners as interpreters was valuable but significant challenges to their use emerged, such as vulnerability to coercion, loss of confidentiality, and errors in interpretation of information (Watt et al. 2018).

Psychiatric assessment and risk assessment largely rely on verbally-mediated tests and discussion. Therefore, all prisoners with communication difficulties are vulnerable to their risk status and their mental health difficulties not being fully recognised. Incomplete understanding of a prisoner’s risk status can potentially endanger staff and fellow prisoners who are in proximity to the prisoner.

**27.9 Older prisoners**

As already discussed, the worldwide prison population is increasing. In countries including the UK, the USA, Australia, Canada, and New Zealand, the fastest rise in prisoners is in the number of older prisoners (Stevens et al. 2017; Maschi et al. 2012). One of the reasons for this increase is the growing number of men convicted of historical sexual offences (Prison Reform Trust 2017). The term ‘older prisoners’ usually refers to prisoners over 50 years of age. This reflects the well-documented fact that prison accelerates physiological ageing (Hayes et al. 2012), although there is some variation in studies.

*27.9.1 Multi-morbidity in older prisoners*

Gates et al. (2018) examined multi-morbidity patterns in the entire over 50s male prison population in the Department of Corrections in the South East Central region of the United States. Multi-morbidity and functional limitations are associated with populations with limited economic resources which includes most imprisoned individuals (McLean et al. 2014). There were 2,010 men aged 50 years or older with a sentence of over six months. Data was extracted from their medical records using ICD-9 codes to identify all chronic diseases, mental health problems, substance use disorders, and functional limitations. 56% of the older population had multiple morbidities and 10% of the group had functional limitations. Three patterns of comorbidity were identified. These were associated with chronic diseases, geriatric conditions (e.g. joint problems and dementia), and the third category of substance misuse and mental health disorders. 54% of the older prisoners appeared in two or three of the categories. Communication difficulties were not included as a potential functional limitation, but problems with oral health, such as tooth loss having the potential to affect speech, and hearing impairment were recognised.

A study of factors related to quality of life in older prisoners showed that physical health, psychological health, social relationships and environmental factors all contributed to reduced quality of life (De Smet et al. 2017). The prisoners were in sixteen prisons in a Dutch-speaking region of Belgium. There were 93 cases which represented 45% of the entire population of older prisoners in Flanders. Their mean age was 65.2 years. The prisoners were examined on a series of tests such as the Mini International Neuropsychiatric Interview (Sheehan and Lecrubier 2006), the Forensic Camberwell Assessment of Need (CANFOR; Thomas et al. 2008), the Tilburg Frailty Scale (Gobbens et al. 2013), and the WHOQUAL BREF which is a quality-of-life scale that can be applied irrespective of context and which has been validated for use with prisoners (Saloppe and Pham 2006).

The results showed that 24.2% of the older prisoners had at least one psychiatric disorder and 15% graded themselves as vulnerable people. All respondents had at least one physical health problem. 63.4% did not engage in personal conversations with prison staff, which is suggested as the reason for ‘social relationships’ being the lowest scoring of the four scales of the WHOQUAL. This has been reported in other studies which suggest that social isolation in older prisoners may be a response to increased perceptions of potential rejection and victimisation (Ireland and Qualter 2008). De Smet et al. (2017) suggest that special attention should be given to psychiatric and age-related symptoms of older prisoners as these are less likely to be noted by staff, and older prisoners appear to be less effective self-advocates than their younger peers.

A study of distress in older prisoners in the USA used a cross-sectional approach to examine 125 participants aged 55 years or over (Bolano et al. 2016). They used a ‘teach to goal’ methodology to obtain informed consent, which has been shown to be effective for older adults with low literacy levels (Sudore et al. 2006). The main distress instrument used was the Memorial Symptom Assessment Scale (MSAS; Portenoy et al. 1994) which has been used to measure physical distress in vulnerable adult populations (Ritchie et al. 2014). Measures of physical and psychological distress, social distress and existential distress are given. The results showed that 44% of the older prisoners had at least one symptom of physical distress, with pain being the most common symptom. 54% reported existential distress, with missing out on things in life due to substance abuse (30%) and having unfinished business (27%) being the most common symptoms. 56% reported psychological distress, with depression (26%) and anxiety (30%) the most common symptoms reported. 45% reported social distress on the Three Item Loneliness Scale (Hughes et al. 2004), with previous studies showing that loneliness is a predictor of functional decline and death (Perissinotto et al. 2012). 49% of the participants experienced three or more forms of distress.

*27.9.2 Mental health in older prisoners*

The mental health of older prisoners can be particularly challenging. Murdoch, Morris and Holmes (2008) examined depression in older prisoners who had a life sentence or an indeterminate sentence. The prisoners were from two category B prisons in the UK. The Geriatric Depression Scale (Yesavage et al. 1983) and the Mini Mental State Examination (MMSE; Folstein et al. 1975) were used to assess 121 prisoners who represented two thirds of the older (over 55 years) prisoner population in the two prisons. The results showed that 48% of the prisoners scored in the mild depression range and 3% scored in the severe depression range. Of the 49% who scored below the threshold for depression, the majority were in the borderline depression range. Prisoners with reduced cognitive functioning as measured via the MMSE demonstrated higher depression scores. Contrary to expectation, higher Geriatric Depression Scale scores were not related to the effects of imprisonment or the length of sentence. Rather, the association was with the imported burden of chronic ill health.

Fazel et al. (2001) found that 32% of older prisoners had a diagnosable psychiatric illness and the most common diagnosis was depression. Despite the high levels of those diagnosed with a depressive illness, only 12% were on antidepressant medication. It has been acknowledged that mental health services in prisons are aimed at the younger, more vocal, prison population and older prisoners may be in danger of being ignored (HM Inspectorate of Prisons 2004).

Di Lorito, Vollm and Dening (2017) conducted a systematic review of psychiatric disorders in older prisoners as compared to rates in older people in the community. They reviewed nine studies and found that dementia (3.3%) and alcohol abuse (15.9%) levels were comparable to the community sample and all other psychiatric disorders have a higher prevalence in older prisoners. The prevalence rates in the older prisoners were: any psychiatric disorder 38.4%; depression 28.3%; schizophrenia or psychosis 5.5%; bipolar disorder 4.5%; personality disorder 22.9%; posttraumatic stress disorder 6.2%; and anxiety disorder 14.2%. In addition, 11.8% of the older prisoners were found to have cognitive impairment. Dealing with high levels of psychiatric illness in older prisoners is clearly a challenge for policy and practice in prison healthcare.

*27.9.3 Cognitive impairment in older prisoners*

There is a significant burden of cognitive impairment and dementia in older prisoners. Combalbert et al. (2018) recruited 138 male prisoners who were over the age of 50 and who had been in prison for at least one year from seven prisons in France. They also recruited a control group in the community. The participants were assessed with the Mini Mental State Examination (MMSE; Folstein et al. 1975), the Frontal Assessment Battery (FAB; Dubois et al. 2000), which is used for rapid evaluation of an individual’s executive functioning, the French version of the Nottingham Health Profile (Bucquet et al. 1990), and the World Health Organization Quality of Life Questionnaire (The WHOQOL Group 1993), which questions four aspects of quality of life: physical health; mental health; social relationships; and environment. 18.8% of the prisoners had an MMSE score suggestive of dementia and 89% had a FAB profile suggestive of executive functioning difficulties. Also, the prisoners rated their health and quality of life significantly more negatively than did the comparison men.

Risk factors such as substance abuse, post-traumatic stress disorder (PTSD) and a history of traumatic brain injury have been implicated in cognitive deterioration among prisoners (Loeb and Abudagga 2006; Mallik-Kane and Visher 2008). An alternative explanation for cognitive deterioration may be a lack of interpersonal interactions and cognitive stimulation. Studies have shown increased levels of engagement in social, physical or intellectual activities and higher cognitive ability scores in older people aged 65 years and above (Sposito et al. 2015), and loneliness has been shown to be a marker of cognitive decline (Cacioppo and Hawkley 2009). Difficulties with memory, spatial orientation, and language would be particularly restricting in terms of adapting to prison life, and in building relationships with staff and other inmates. Sposito et al. (2015) suggest that as well as preventing reporting of problems, communication difficulties may prevent prisoners’ participation in prison activities which could slow or halt cognitive decline. They suggest that all prisoners over the age of 50 should be routinely screened for cognitive disorders.

Flatt et al. (2017) examined PTSD in 238 older age (55 years and above) prisoners in a county jail in the USA. The Primary Care PTSD screen (PC-PTSD; Prins et al. 2003) was used. Nearly 40% of the older inmates had a positive screen for post-traumatic stress and they were significantly more likely to have an impairment in two or more activities of daily living, traumatic brain injury, pain in the last week, and poor self-rated health. The authors suggest that screening for PTSD in prisons may help to identify older prisoners who would benefit from additional mental health assessment and treatment.

Gaston (2018) reviewed the impact of dementia on older prisoners in Australia. She suggests that prisons are not designed for older people or for people with dementia which causes problems for physical and psychological health. Gaston calls for early identification of dementia so that support can be provided along with measures to slow progression. However, Brown (2014) suggests that cognitive impairment may not be recognised until a prisoner’s behaviour begins to clash with expectations of the prison environment. As dementia progresses, the prisoner will experience problems with comprehending instructions, socialising, and completing activities of daily living such as performing hygiene-related tasks. These failures may lead to reprimands and disciplinary actions which may adversely impact on the prisoner’s physical and mental health.

**27.10 Older female prisoners**

Most of the research that informed the discussion in section 27.9 is based on older male prisoners. But women form a growing minority in the prison population and elderly female prisoners are a smaller subgroup of the female prison population. A study by Handtke et al. (2015) examined the experience of 13 out of a total of 19 elderly (50 years and over) female prisoners with long-term sentences in Switzerland. As well as medical information from their records, the prisoners had a semi-structured interview about their experiences of ageing in prison. The women felt disadvantaged by being female, being in prison and by ageing. These were described as three layers of vulnerability. The authors made a set of recommendations to improve the experience of elderly female prisoners. First, given the significance of social relationships (Reviere and Young 2004), prisons should have a stronger emphasis on social support networks for elderly female prisoners, which may require revision of rules around visits. Secondly, security and medical staff should be educated about gender and age-specific needs of prisoners. Thirdly, consistent use of handbooks for prison staff and policy makers that are gender sensitive and built on a human rights approach should be made. An example would be the World Health Organization, Penal Reform International (World Health Organization 2011b). In addition, prison health care should provide good quality care for older women and access to specialist services outside of prison.

A study of functional impairments and the experiences of older female prisoners in the US identified 353 women prisoners aged 55 or older in California (Williams et al. 2006). 120 questionnaires were completed with a 59% response rate. In addition, ten older women prisoners or former prisoners were interviewed. The mean age of the women was 62 years, 12% were aged over 70 and 68% were white. 33% reported three or more co-morbid conditions and 78% took five or more medications. 58% reported visual impairment, 52% reported hearing impairment with 27% reporting difficulty in hearing orders from staff, 28% had experienced memory loss and 22% reported incontinence. In addition, 4% reported difficulties with eating. The authors noted that the questionnaire may not have been completed by older women with literacy difficulties, and that literacy difficulties are associated with chronic disease and poor disease self-management (Williams et al. 2006).

**27.11 Dying prisoners**

Turner et al. (2018) propose that older prisoners face a ‘double burden’ when incarcerated in that they are deprived of their liberty and their health and wellbeing needs are not met. In addition, for those of advanced age, a sentence may effectively be a life sentence given that they are likely to die in prison. Hanson (2017) suggests that sentencing reforms and compassionate release programmes in the US have failed to reduce the numbers of elderly or seriously ill prisoners. It is clearly a significant challenge to provide good quality, multi-disciplinary, end-of-life care in a prison environment. Depner et al. (2018) suggest that palliative care can be provided in prison and describes a peer care model in the US, where healthy inmates are trained to provide intimate care. The benefits include improved care for the dying prisoner, reduced workload for staff, and rehabilitation benefits for the caregivers. More research is needed to establish the viability of such schemes.

**27.12 Access to healthcare for older prisoners**

With a growing population of older prisoners, access to healthcare is an increasingly pressing issue. Heidari et al. (2017) explored access to healthcare for older prisoners in Switzerland. Thirty-five older prisoners were interviewed from twelve prisons, with interviews conducted in the relevant native language. The study showed psychological and environmental barriers to accessing healthcare. Psychological factors included anticipated negative consequences of healthcare-seeking behaviours, such as having to mix with a new group of prisoners and limited experience of applying healthy practices to their lifestyle, previously reported by Loeb et al. (2008). In addition, fear of increased isolation by being in a health unit or centre further discouraged healthcare-seeking behaviour. The environmental factors reported related to no health service provision at night and at weekends and non-availability of services such as physiotherapy and dentistry.

Sullivan et al. (2016) showed that 85% of older prisoners (aged 60 and over) were in receipt of prescribed medication when they were committed to prison. Older prisoners experienced delays in confirming medication, changes to medication, communication difficulties, and enforced helplessness. This study shows that there is a need to increase awareness of prescribing issues specific to older prisoners who are likely to have greater and more complex medication needs than their younger peers.

Sumner (2012) has developed a healthcare assessment protocol for all prisoners as part of a prison healthcare department’s work to ensure that older prisoners’ needs are recognised and managed. The healthcare department is run by nurses with general practitioner input at three surgeries per week. All prisoners are interviewed by a member of healthcare staff on arrival at the prison to take initial baseline observations such as weight and blood pressure. Any medical conditions are recorded, and medical and surgical history, current and past mental health, use of illicit substances such as alcohol and drugs and prescribed and non-prescribed medication usage are all explored. This assessment relies on self-report and may, therefore, be compromised by an inability to communicate fully. Bryan et al. (2007) have demonstrated that self-report is limited in young offenders.

Where prisoners are over 65 years of age, an Elderly and Disabled Assessment (EDA; Sumner 2012) is conducted. The EDA consists of six computerised evaluations to explore areas where conditions associated with ageing are known to potentially impact on health. The six areas are: continence; mental health; skin condition; mobility and respiration; nutrition; and vision, hearing and speech. The latter are tested as these are known to reduce a person’s ability to adapt to prison life by reducing the likelihood of involvement in activities such as education and interaction with fellow prisoners. Where appropriate, referrals to an optician, a hearing aid clinic, or a speech and language therapist can be made. Each prisoner has a care plan with the regime being adjusted where possible, e.g. longer mealtimes when a prisoner has eating difficulties. The care plans are shared with key workers and are regularly monitored by the healthcare team.

This is an example of integrated healthcare provision that is extending to accommodate the needs of older prisoners. Sumner’s study shows that this can be accomplished, and there is a need for prisons to adapt systematically baseline health screening to accommodate the needs of older prisoners.

**27.13 Policy and research agenda for older prisoners**

In 2012, a meeting of 29 experts was convened to establish the priorities for improving the management of older prisoners. Williams et al. (2012) state that as well as the legal and moral arguments for attention to the healthcare needs of older prisoners, there is also a wider benefit to society in that more than 95% of prisoners are eventually released to the community in the US. Many of these people will have chronic health conditions and will rely on expensive emergency services or are hospitalised after release (Mallik-Kane and Visher 2008). Therefore, earlier identification and management of age-related conditions and chronic illnesses could enable independent functioning in the community through use of community healthcare resources. The consensus recommendations of the meeting were:

* To define older prisoners as 55 or over, with arrangements to include younger prisoners who have cognitive or functional impairments in activities of daily living
* To train staff in prisons, probation and health in the care of older people
* To define the functional requirements that are necessary to live in prison and to use that list to screen for impairment annually in prisoners over the age of 55 years
* To screen for dementia annually by developing an optimal tool, and to use the results to guide decisions about housing, care programming, medical treatment and discharge planning
* To identify the needs of older women prisoners
* To create uniform policies for housing older prisoners with provision of a continuum of care, including assisted living and 24-hour nursing care
* To ensure release provision includes linking older prisoners to post-release healthcare, close supervision of people with cognitive impairment after release, and available support for health literacy and self-efficacy in the community
* To create national medical eligibility criteria for early release and to remove barriers that could prevent some prisoners from accessing the application process
* To enhance prison palliative care services and to ensure that all healthcare providers are trained in pain management and communicating with patients

Further research is needed into the health and wellbeing of adult prisoners. This could be justified from a moral and ethical stance, but it would also enable prisoners to achieve better outcomes, i.e. lead healthier lives and reduce re-offending. The taxpayer has a vested interest in society achieving this goal. Specifically, research is needed to understand how young offenders with speech, language and communication difficulties navigate entry to adult prison and their outcomes. Studies are needed to show what proportion of the adult prison population has speech, language and communication difficulties and how these impact on their ability to benefit from the regime and from interventions to prevent re-offending. Research is needed to understand how prisoners with communication difficulties impact on the work of prison officers and other staff, and to establish what support staff need in managing these prisoners. There is some research to suggest that positive social relationships with staff and with other inmates constitute a positive coping strategy for adults who are in prison. The impact of communication difficulties on social relationships in the context of prison also needs to be better understood.

Assessment of risk in prisoners with speech, language and communication difficulties also needs to be investigated. The use of non-verbal techniques to supplement verbally-mediated assessments should also be explored. The needs of specific groups of adult prisoners, who are likely to have communication problems, also needs further research; particularly for deaf prisoners, those with developmental disorders, those with mental health problems, and older prisoners who may have health conditions associated with ageing.

**27.14 Summary**

Adults in prison experience many forms of disadvantage which impact negatively on their health. Many conditions have negative consequences for speech, language and communication functioning, but these difficulties are rarely identified in adults in prison, despite effective communication with both staff and other prisoners being recognised as a positive coping factor for prisoners. Older prisoners are the fastest-growing sector of the prison population in the western world. There is increasing recognition of the problems of caring for older people in a prison environment, with access to healthcare being a further issue. It is important that more research is conducted into the speech, language and communication needs of adult prisoners and how these impact on access to both healthcare and to provision aimed at preventing re-offending. Research is also needed to understand how best to support prison staff in managing people with a range of communication difficulties.

**BIBLIOGRAPHY**

Allen, D., Evans, C., Hider, A., Hawkins, S., Pechett, H., & Morgan, H. (2008). Offending behaviour in adults with Asperger’s syndrome. *Journal of Autism and Developmental Disorders*, 38(4), 748-758.

Barker, E., Kolves, K., & De Leo, D. (2014). Management of suicidal and self-harming behaviors in prisons: Systematic literature review of evidence-based activities. *Archives of Suicide Research*, 18(3), 227-240.

Barnoux, M., & Wood, J. (2013). The specific needs of foreign national prisoners in the UK and the threat to their mental health from being imprisoned in a foreign country. *Aggression and Violent Behavior*, 18(2), 240-246.

Bhui, H. S. (2009). Foreign national prisoners: Issues and debates. In H. S. Bhui (Ed.), *Race and criminal justice* (pp. 154-169). London: Sage.

Binswanger, I. A., Merrill, J. O., Krueger, P. M., White, M. C., Booth, R. E., & Elmore, J. G. (2010). Gender differences in chronic medical, psychiatric and substance-dependence disorders among jail inmates. *American Journal of Public Health*, 100(3), 476-482.

Bolano, M., Ahalt, C., Ritchie, C., Stijacic-Cenzer, I., & Williams, B. (2016). Detained and distressed: Persistent distressing symptoms in a population of older jail inmates. *Journal of the American Geriatrics Society*, 64(11), 2349-2355.

Borrill, J., & Taylor, D. (2009). Suicides by foreign national prisoners in England and Wales 2007: Mental health and cultural issues. *Journal of Forensic Psychology*, 20(6), 886-905.

Bradley, K. (2009). *Lord Bradley’s review of people with mental health problems or learning disabilities in the criminal justice system*. London: HM Stationery Office.

Brown, J.-A. (2014). *Dementia in prison*. Discussion paper #9 March 2014. North Ryde, NSW: Alzheimer’s Australia NSW.

Bryan, K. (2004). Preliminary study of the prevalence of speech and language difficulties in young offenders. *International Journal of Language and Communication Disorders*, 39(3), 391-400.

Bryan, K., Freer, J., & Furlong, C. (2007). Language and communication difficulties in juvenile offenders. *International Journal of Language and Communication Disorders*, 42(5), 505‑520.

Bryan, K., Garvani, G., Gregory, J., & Kilner, K. (2015). Language difficulties and criminal justice: The need for earlier intervention. *International Journal of Language and Communication Disorders*, 50(6), 763-775.

Bryan, K., & Gregory, J. (2013). Perceptions of staff on embedding speech and language therapy within a youth offending team. *Child Language Teaching and Therapy*, 29(3), 359-371.

Bucquet, D., Condon, S., & Ritchie, K. (1990). The French version of the Nottingham Health Profile. A comparison of items weights with those of the source version. *Social Science and Medicine*, 30(7), 829-835.

Bureau of Justice Statistics (2015). *Mortality in local jails and state prisons, 2000-2013 - statistical tables*. Washington, DC: Bureau of Justice Statistics.

Butler, T., Indig, D., Allnutt, S., & Mamoon, H. (2011). Co-occurring mental illness and substance use disorder among Australian prisoners. *Drug Alcohol Review*, 30(2), 188-194.

Cacioppo, J. T., & Hawkley, L. C. (2009). Perceived social isolation and cognition. *Trends in Cognitive Sciences*, 13(10), 447-454.

Chang, Z., Lichtenstein, P., Larsson, H., & Fazel, S. (2015). Substance use disorders, psychiatric disorders and mortality after release from prison: A nationwide longitudinal cohort study. *Lancet Psychiatry*, 2, 422-430.

Combalbert, N., Pennequin, V., Ferrand, C., Armand, M., Anselme, M., & Geffray, B. (2018). Cognitive impairment, self-perceived health and quality of life of older prisoners. *Criminal Behaviour and Mental Health*, 28(1), 36-49.

Depner, R. M., Grant, P. C., Byrwa, D. J., Breier, J. M., Lodi-Smith, J., Luczkiewicz, D. L., & Kerr, C. W. (2018). “People don’t understand what goes on here”: A consensual qualitative research analysis of inmate-caregiver perspectives on prison-based end-of-life care. *Palliative Medicine*, 32(5), 969-979.

De Smet, S., De Donder, L., Ryan, D., Regenmortel, D. B., & Vandervelde, S. (2017). Factors related to quality of life in older prisoners. *Quality of Life Research*, 26(6), 1571-1585.

Di Lorito, C., Vollm, B., & Dening, T. (2017). Psychiatric disorders among older prisoners: A systematic review and comparison study against older people in the community. *Aging and Mental Health*, 22(1), 1-10.

Dubois, B., Slachevsky, A., Litvan, I., & Pillon, B. (2000). The FAB: A frontal assessment battery at bedside. *Neurology*, 55(11), 1621-1626.

Duthe, G., Hazard, A., Kensey, A., & Pan Ke Shon, J.-L. (2013). Suicide among male prisoners in France: A prospective population-based study. *Forensic Science International*, 233(1-3), 273-277.

Fazel, S., & Seewald, K. (2012). Severe mental illness in 33588 prisoners worldwide: Systematic review and meta-regression analysis. *British Journal of Psychiatry*, 200(5), 364-373.

Fazel, S., Grann, M., Kling, B., & Hawton, K. (2011). Prison suicide in 12 countries: An ecological study of 861 suicides during 2003-2007. *Social Psychiatry and Psychiatric Epidemiology*, 46(3), 191-195.

Fazel, S., Hayes, A. J., Bartellas, K., Clerici, M., & Trestman, R. (2016). The mental health of prisoners: A review of prevalence, adverse outcomes and interventions. *Lancet Psychiatry*, 3(9), 871-881.

Fazel, S., Hope, T., O’Donnell, I., & Jacoby, R. (2001). Hidden psychiatric morbidity in elderly prisoners. *British Journal of Psychiatry*, 179, 535-539.

Fazel, S., Wolf, A., Palm, C., & Lichtenstein, P. (2014). Violent crime, suicide and premature mortality in patients with schizophrenia and related disorders: A 38-year-old population study in Sweden. *Lancet Psychiatry*, 1(1), 44-54.

Flatt, J. D., Williams, B. A., Barnes, D., Goldenson, J., & Ahalt, C. (2017). Post-traumatic stress disorder symptoms and associated health and social vulnerabilities in older jail inmates. *Aging and Mental Health*, 21(10), 1106-1112.

Folstein, M., Folstein, S. E., & McHugh, P. R. (1975). “Mini-Mental State”. A practical method for grading the cognitive state of patients. *Journal of Psychiatric Research*, 12(3), 189-198.

Gahir, M., O’Rourke, S., Monteiro, B., & Reed, R. (2011). The unmet needs of deaf prisoners: A survey of prisons in England and Wales. *International Journal of Mental Health and Deafness*, 1(1), 58-63.

Gaston, S. (2018). Vulnerable prisoners: Dementia and the impact on prisoners, staff and the correctional setting. *Collegian*, 25(2), 241-246.

Gates, M. L., Hunter, E. G., Dicks, V., Jessa, P. N., Walker, V., & Yoo, W. (2018). Multimorbidity patterns and associations with functional limitations among an aging population in prison. *Archives of Gerontology and Geriatrics*, 77, 115-123.

Gobbens, R. J. J., Luijkx, K. G., & van Essen, M. (2013). Explaining quality of life of older people in the Netherlands using a multidimensional assessment of frailty. *Quality of Life Research*, 22(8), 2051-2061.

Graf, M., Wermuth, P., Hafeli, D.,  [Weisert, A](https://www.ncbi.nlm.nih.gov/pubmed/?term=Weisert%20A%5BAuthor%5D&cauthor=true&cauthor_uid=23642321)., [Reagu, S](https://www.ncbi.nlm.nih.gov/pubmed/?term=Reagu%20S%5BAuthor%5D&cauthor=true&cauthor_uid=23642321)., [Pflüger, M](https://www.ncbi.nlm.nih.gov/pubmed/?term=Pfl%C3%BCger%20M%5BAuthor%5D&cauthor=true&cauthor_uid=23642321)., [Taylor, P](https://www.ncbi.nlm.nih.gov/pubmed/?term=Taylor%20P%5BAuthor%5D&cauthor=true&cauthor_uid=23642321)., [Dittmann, V](https://www.ncbi.nlm.nih.gov/pubmed/?term=Dittmann%20V%5BAuthor%5D&cauthor=true&cauthor_uid=23642321)., & [Jones, R](https://www.ncbi.nlm.nih.gov/pubmed/?term=Jones%20R%5BAuthor%5D&cauthor=true&cauthor_uid=23642321). (2013). Prevalence of mental disorders among detained asylum seekers in deportation arrest in Switzerland and validation of the Brief Jail Mental Health Screen BJMHS. *International Journal of Law and Psychiatry*, 36(3-4), 201-206.

Gregory, J., & Bryan, K. (2011). Speech and language therapy intervention with a group of persistent and prolific young offenders in a non-custodial setting with previously un-diagnosed speech, language and communication difficulties. *International Journal of Language and Communication Disorders*, 46(2), 202-215.

Handtke, V., Bretschneider, W., Elger, B., & Wangmo, T. (2015). Easily forgotten: Elderly female prisoners. *Journal of Aging Studies*, 32, 1-11.

Hanson, A. (2017). Psychiatry and the dying prisoner. *International Review of Psychiatry*, 29(1), 45-50.

Hawton, K., Linsell, L., Adeniji, T., Sariaslan, A., & Fazel, S. (2014). Self-harm in prisons in England and Wales: An epidemiological study of prevalence, risk factors, clustering and subsequent suicide. *Lancet*, 383(9923), 1147-1154.

Hayes, A. J., Burns, A., Turnbull, P., & Shaw, J. (2012). The health and social needs of older male prisoners. *International Journal of Geriatric Psychiatry*, 27(11), 1155-1162.

Heidari, R., Wangmo, T., Galli, S., Shaw, D. M., Elger, B. S. on behalf of the AgeQuake Group. (2017). Accessibility of prison healthcare for elderly inmates, a qualitative assessment. *Journal of Forensic and Legal Medicine*, 52, 223-228.

HM Inspectorate of Prisons (2004) *‘No problems – old and quiet’: Older prisoners in England and Wales*. A Thematic Review by HM Chief Inspector of Prisons for England and Wales 2002-2003. London: The Stationery Office.

HM Inspectorate of Prisons (2010) *HM Chief Inspector of Prisons for England and Wales: Annual Report 2008-09.* London: The Stationery Office.

HM Inspectorate of Prisons (2011) *HM Chief Inspector of Prisons for England and Wales: Annual Report 2010-11*. London: The Stationery Office.

HM Inspectorate of Prisons (2015) *HM Chief Inspector of Prisons for England and Wales: Annual Report 2014-15.* London: The Stationery Office.

HM Inspectorate of Prisons (2018) *HM Chief Inspector of Prisons for England and Wales: Annual Report 2017-18*. London: The Stationery Office.

HM Prison Service (2018). Population Bulletin: monthly December 2018. London: HM Prison Service.

Hughes, N., Chitabesan, P., Bryan, K., Borschmann, R., Swain, N., Lennox, C., & Shaw, J. (2017). Language impairment and comorbid vulnerabilities among young people in custody. *Journal of Child Psychology and Psychiatry*, 58(10), 1106-1113.

Hughes, M. E., Waite, L. J., Hawkley, L. C., & Cacioppo, J. T. (2004) A short scale for measuring loneliness in large surveys: Results from two population-based studies. *Research on Aging*, 26(6), 655-672.

Ireland, J. L., & Qualter, P. (2008). Bullying and social and emotional loneliness in a sample of adult male prisoners. *International Journal of Law and Psychiatry*, 31(1), 19-29.

Jones, G., & Talbot, J. (2010). No one knows: The bewildering passage of offenders with learning disability and learning difficulty through the criminal justice system. *Criminal Behaviour and Mental Health*, 20(1), 1-7.

Konrad, N., Daigle, M. S., Daniel, A. E., Dear, G. E., Frottier, P., Hayes, L. M., Kerkhof, A., Liebling, A., & Sarchiapone, M. (2007). Preventing suicide in prisons, part 1. Recommendations from the International Association for Suicide Prevention Task Force on Suicide in Prisons. *Crisis*, 28(3), 113-121.

Lappi-Seppälä, T. (2015). Why some countries cope with lesser use of imprisonment. Explaining differences and pondering the remedies. University of Helsinki. <http://www.antoniocasella.eu/nume/Lappi-Sepp%C3%A4l%C3%A4_2015.pdf>. Accessed 20 May 2019.

Loeb, S. J., & Abudagga, A. (2006). Health-related research on older inmates: An integrative review. *Research in Nursing & Health*, 29(6), 556-565.

Loeb, S. J., Steffensmeier, D., & Lawrence, F. (2008). Comparing incarcerated and community-dwelling older men’s health. *Western Journal of Nursing Research*, 30(2), 234-249.

Mallik-Kane, K., & Visher, C. (2008). *Health and prisoner re-entry: How physical, mental and substance abuse conditions shape the process of reintegration*. Washington, DC: The Urban Institute.

Maruschak, L. M. (2008). *Medical problems of prisoners*. US Bureau of Justice Statistics. <https://www.bjs.gov/content/pub/pdf/mpp.pdf>. Accessed 20 May 2019.

Maschi, T., Viola, P., & Sun, F. (2012). The high cost of the international aging prisoner crisis: Wellbeing as the common denominator for action. *Gerontology*, 53(4), 543-554.

McKenzie, K., & Paxton, D. (2006). *Learning disability screening questionnaire*. Edinburgh: GCM Records.

McLean, G., Gunn, J., Wyke, S., Guthrie, B., Watt, G. C., Blane, D. N., & Mercer, S. W. (2014). The influence of socioeconomic deprivation on multimorbidity at different ages: A cross sectional study. *British Journal of General Practice*, 64(624), e440-e447. doi:10.3399/bjgp14X680545.

Miller, K., & Vernon, M. (2003). Deaf sex offenders in a prison population. *Journal of Deaf Studies and Deaf Education*, 8(3), 357-362.

Miller, K., Vernon, M., & Capella, M. E. (2005). Violent offenders in a deaf prison population. *Journal of Deaf Studies and Deaf Education*, 10(4), 417-425.

Ministry of Justice (2012). *Prisoners’ childhood and family backgrounds*. London: Ministry of Justice.

Ministry of Justice (2018a). *Offender management statistics quarterly: April to June 2018*. London: Ministry of Justice.

Ministry of Justice (2018b). *Proven reoffending statistics quarterly: October to December 2016*. London: Ministry of Justice.

Ministry of Justice (2018c). *Population and capacity briefing for Friday 30 November 2018*. London: Ministry of Justice.

Ministry of Justice (2018d). *Women and the criminal justice system 2017*. London: Ministry of Justice.

Ministry of Justice (2019). *Proven reoffending statistics quarterly bulletin, January 2017 to March 2017*. Ministry of Justice: London.

Mouridsen, S. E., & Hauschild, K.-M. (2009). A long-term study of offending in individuals diagnosed with a developmental disorder as children. *International Journal of Speech-Language Pathology*, 11(3), 171-179.

Murdoch, N., Morris, P., & Holmes, C. (2008). Depression in elderly life sentence prisoners. *International Journal of Geriatric Psychiatry*, 23(9), 957-962.

Murphy, G., Gardner, J., & Freeman, M. J. (2017). Screening prisoners for intellectual disabilities in three English prisons. *Journal of Applied Research in Intellectual Disabilities*, 30(1), 198-204.

O’Rourke, S., & Grewer, G. (2005). Assessment of deaf people in forensic mental health settings: A risky business! *Journal of Forensic Psychiatry & Psychology*, 16(4), 671-684.

Perissinotto, C. M., Stijacic, C. J., & Covinsky, K. E. (2012). Loneliness in older persons: A predictor of functional decline and death. *Archives of Internal Medicine*, 172(14), 1078-1083.

Portenoy, R. K., Thaler, H. T., Kornblith, A. B., [Lepore, J. M.,](https://www.sciencedirect.com/science/article/pii/0959804994901821#!) [Friedlander-Klar](https://www.sciencedirect.com/science/article/pii/0959804994901821%22%20%5Cl%20%22%21), H., [Kiyasu](https://www.sciencedirect.com/science/article/pii/0959804994901821#!), E[., Sobel](https://www.sciencedirect.com/science/article/pii/0959804994901821#!), [K.](https://www.sciencedirect.com/science/article/pii/0959804994901821#!), Coyle, N., Kemeny, [N](https://www.sciencedirect.com/science/article/pii/0959804994901821#!)., Norton, L., et al. (1994) The Memorial Symptom Assessment Scale: An instrument for the evaluation of symptom prevalence, characteristics and distress. *European Journal of Cancer*, 30A(9), 1326-1336.

Prins, A., Ouimette, P., Kimerling, R., Cameron, R. P., Hugelshofer, D. S., Shaw-Hegwer, J., Thrailkill, A., Gusman, F. D., & Sheikh, J. I. (2003). The primary care PTSD screen (PC-PTSD): Development and operating characteristics. *Primary Care Psychiatry*, 9(1), 9-14.

Prison Reform Trust (2017). *Bromley briefings prison factfile. Autumn 2017*. London: Prison Reform Trust.

Prison Reform Trust (2018). *Bromley briefings prison factfile. Autumn 2018*. London: Prison Reform Trust.

Reviere, R., & Young, V. D. (2004). Aging behind bars: Health care for older female inmates. *Journal of Women and Aging*, 16(1-2), 55-69.

[Ritchie, C.,](https://www.sciencedirect.com/science/article/pii/S0885392413003345#!)  Dunn, L., Paul, S. M., [Cooper, B. A.,](https://www.sciencedirect.com/science/article/pii/S0885392413003345#!)  [Skerman, H.,](https://www.sciencedirect.com/science/article/pii/S0885392413003345#!)  [Merriman](https://www.sciencedirect.com/science/article/pii/S0885392413003345%22%20%5Cl%20%22%21), J. D., [Aouizerat, B.,](https://www.sciencedirect.com/science/article/pii/S0885392413003345#!)  [Alexander, K.,](https://www.sciencedirect.com/science/article/pii/S0885392413003345#!) [Yates, P.,](https://www.sciencedirect.com/science/article/pii/S0885392413003345%22%20%5Cl%20%22%21) [Cataldo, J.,](https://www.sciencedirect.com/science/article/pii/S0885392413003345%22%20%5Cl%20%22%21) &  [Miaskowski , C.](https://www.sciencedirect.com/science/article/pii/S0885392413003345#!) (2014). Differences in the symptom experience of older oncology outpatients. *Journal of Pain and Symptom Management*, 47(4), 697-709.

Saloppé, X., & Pham, T. H. (2006). Validation du WHOQOL-bref en hôpital psychiatrique sécuritaire. *Psychiatrie et Violence*, 6(1). <https://www.researchgate.net/profile/Xavier_Saloppe/publication/269762611_Validation_du_WHOQOL-bref_en_hopital_psychiatrique_securitaire/links/549594470cf2ec13375b29f5/Validation-du-WHOQOL-bref-en-hopital-psychiatrique-securitaire.pdf>. Accessed 20 May 2019.

Sen, P., Exworthy, T., & Forrester, A. (2014) Mental health care for foreign national prisoners in England and Wales. *Journal of Mental Health*, 23(6), 333-339.

Sheehan, D.V., & Lecrubier, Y. (2006). *Mini-International Neuropsychiatric Interview* (MINI). <https://eprovide.mapi-trust.org/instruments/mini-international-neuropsychiatric-interview>. Accessed 20 May 2019.

[Snow, P. C](https://www.ncbi.nlm.nih.gov/pubmed/?term=Snow%20PC%5BAuthor%5D&cauthor=true&cauthor_uid=31017853). (2019). Speech-language pathology and the youth offender: Epidemiological overview and roadmap for future speech-language pathology research and scope of practice. [*Language, Speech, and Hearing Services in Schools*, 50(2), 324-339.](https://www.ncbi.nlm.nih.gov/pubmed/31017853)

Snow, P. C., & Bryan, K. (2018). Supporting young adults with language impairments in the youth justice system. In S. Spencer (Ed.), *Supporting adolescents with language disorders* (pp. 73-92). Chichester: J&R Press Ltd.

Snow, P. C., & Woodward, M. N. (2017). Intervening to address communication difficulties in incarcerated youth: A phase 1 clinical trial. *International Journal of Speech-Language Pathology*, 19(4), 392-406.

Sposito, G., Neri, A. L., & Yassuda, M. S. (2015). Cognitive performance and engagement in physical, social and intellectual activities in older adults: The FIBRA study. *Dementia and Neuropsychologia*, 9(3), 270-278.

Stevens, B. A., Shaw, R., Brewer, P., Salt, M., Alexander, R., & Bee, B. L. (2017). Systematic review of aged care interventions for older prisoners. *Australasian Journal on Ageing*, 37(1), 34-42.

Sudore, R. L., Landefield, C. S., Williams, B. A., Barnes, D. E., Lindquist, K., & Schiller, D. (2006). Use of a modified informed consent process among vulnerable patients: A descriptive study. *Journal of General Internal Medicine*, 21(8), 867-873.

Sullivan, V., Forsyth, K., Hassan, L., O’Hara, K., Senior, J., & Shaw, J. (2016). ‘You can’t have them in here’: Experiences of accessing medication among older men on entry to prison. *Ageing and Society*, 36(6), 1254-1271.

Sumner, A. (2012). Assessment and management of older prisoners. *Nursing Older People*, 24(3), 16-21.

Talbot, J. (2008). *Prisoners’ voices: Experiences of the criminal justice system by prisoners with learning disabilities and difficulties*. London: Prison Reform Trust.

The WHOQAL Group (1993). Study protocol for the World Health Organization project to develop a quality of life assessment instrument (WHOQAL). *Quality of Life Research*, 2(2), 153-159.

Thomas, S. D. M., Slade, M., McCrone, P., Harty, M. A., Parrott, J., Thornicroft, G., & Leese, M. (2008). The reliability and validity of the forensic Camberwell Assessment of Need (CANFOR): A needs assessment for forensic mental health service users. *International Journal of Methods in Psychiatric Research*, 17(2), 111-120.

## [Turner, M., Peacock, M.,](https://www.sciencedirect.com/science/article/pii/S0277953618303654#!) [Payne,](https://www.sciencedirect.com/science/article/pii/S0277953618303654%22%20%5Cl%20%22%21) S., [Fletcher,](https://www.sciencedirect.com/science/article/pii/S0277953618303654#!) A., & [Froggatt](https://www.sciencedirect.com/science/article/pii/S0277953618303654#!), K. (2018). Ageing and dying in the contemporary neoliberal prison system: Exploring the ‘double burden’ for older prisoners. [*Social Science & Medicine*](https://www.sciencedirect.com/science/journal/02779536), 212, 161-167.

US Department of Justice (2018). *Jail inmates in 2016*. Bureau of Justice Statistics. <https://www.bjs.gov/content/pub/pdf/ji16.pdf>. Accessed 20 May 2019.

Vernon, M., & Greenberg, S. F. (1999). Violence in deaf and hard of hearing people: A review of the literature. *Aggression and Violent Behavior*, 4(3), 259-272.

Vernon, M., & Rich, S. (1997). Paedophilia and deafness. *American Annals of the Deaf*, 142(4), 300-311.

Voller, F., Silvestri, C., Martino, G., Fanti, E., Bazzerla, G., Ferrari, F., Grignani, M., Libianchi, S., Pagano, A. M., Scarpa, F., Stasi, C., & Di Fiandra, T. (2016). Health conditions of inmates in Italy. *BMC Public Health*, 16(1): 1162. Doi 10.1186/s12889-016-3830-2.

Walmsley, R. (2018). *World prison population list, twelfth edition*. Institute for Criminal Policy Research. <http://www.prisonstudies.org/sites/default/files/resources/downloads/wppl_12.pdf>. Accessed 20 May 2019.

Watt, K., Hu, W., Magin, P., & Abbott, P. (2018). “Imagine if I’m not here, what they’re going to do?” – Health-care access and culturally and linguistically diverse women in prison. *Health Expectations*, 21(6), 1159-1170.

Williams, B. A., Lindquist, K., Sudore, R. L., Strupp, H. M., Willmott, M. P. H., & Walter, L. C. (2006). Being old and doing time: Functional impairment and adverse experiences of geriatric female prisoners. *Ethnogeriatrics and Special Populations*, 54(4), 702-707.

Williams, B. A., Stern, M. F., Mellow, J., Safer, M., & Greifinger, R. B. (2012). Aging in correctional custody: Setting a policy agenda for older prisoner health care. *American Journal of Public Health*, 102(8), 1475-1481.

Williams, H. K., Taylor, P. J., Walker, J., Plant, G., Kissell, A., & Hammond, A. (2013). Subjective experience of early imprisonment. *International Journal of Law and Psychiatry*, 36(3-4), 241-249.

Williamson, L. H., & Grubb, A. R. (2015). An analysis of the relationship between being deaf and sexual offending. *Journal of Sexual Aggression*, 21(2), 224-243.

World Health Organization (2011a). *International classification of diseases, ninth revision, clinical modification* (ICD-9-CM). Geneva: World Health Organization.

World Health Organization (2011b). Women’s health in prison: Action guidance and checklists to review current policies and practices. Resource document. <http://www.euro.who.int/__data/assets/pdf_file/0015/151053/e95760.pdf?ua=1>. Accessed 20 May 2019.

Yesavage, J. A., Brink, T. L., Rose, T. L., Lum, O., Huang, V., & Adey, M. (1983). Development and validation of a geriatric depression screening scale: A preliminary report. *Journal of*Psychiatric *Research*, 17(1), 37-49.

Young, A., Howarth, P., Ridgeway, S., & Monteiro, B. (2001). Forensic referrals to the three specialist psychiatric units for deaf people in the UK. *Journal of Forensic Psychiatry*, 12(1), 19-35.

Young, A., Monteiro, B., & Ridgeway, S. (2000). Deaf people with mental health needs in the criminal justice system: A review of the UK literature. *Journal of Forensic Psychiatry*, 11(3), 556-570.

Youth Custody Service (2018). *Youth custody report*. London: UK Government.

**BIOGRAPHY**

**Karen Bryan** OBE is a Professor and Speech and Language Therapist with extensive experience of working with adults who have acquired communication difficulties. Karen worked for fourteen years as a Consultant Speech and Language Therapist at one of the UK’s high security psychiatric hospitals. Her more recent research has focussed on language difficulties in young offenders. A grant from the Helen Hamlyn Trust enabled her to lead a project initiating the first speech and language therapy services in young offender institutions in England and the first systematic studies of the levels of language ability that young offenders present with.

**INDEX KEYWORDS**

access to health care

adult prisoner

communication difficulty

female prisoner

health disadvantage

young offender

older prisoner

prison statistics