



A health needs assessment of people on probation within the Swansea Neath Port Talbot Probation Delivery Unit (SNPT PDU)

2022

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Title

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Publication date

December 2022

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1. Executive Summary

The health needs of those under probation are expected to be high although the evidence to support this is lacking. There are numerous benefits to improving health outcomes for this group. Probation services provide access to a population frequently defined as hard to reach by traditional health services. Improving the health of this cohort will reap wider community health gains. To the authors' knowledge, this is the first health needs assessment (HNA) of a probation population in Wales. The work aimed to describe the health needs of people under probation in the Swansea Neath Port Talbot Probation Delivery Unit (SNPT PDU), providing a broad overview of needs that could be used to identify areas where deeper investigation is needed.

The HNA consists of a rapid review of the literature followed by a survey amongst probation service users in the SNPT PDU. The literature review identified a paucity of evidence with only seven studies meeting the search criteria. Evidence primarily focused on mental health problems for which the prevalence for those on probation was higher than the general population. The same was found for physical health conditions. Despite an increased prevalence of poor health, evidence suggests those on probation access healthcare services at a lower rate than the general population. The overall picture is of an under-researched group with poor health and infrequent uptake of healthcare services.

To understand local need, a survey was undertaken amongst 257 probation service users under the SNPT PDU. Where possible, questions were replicated from the National Survey for Wales¹ to enable comparison with the general population. The majority of respondents were white males aged 21-49 years of age, consistent with the demographics of probation cohorts in Wales. Self-reported general health was lower than the general population, with less than half rating their health as good or very good. Prevalence of attention deficit hyperactivity disorder (ADHD), autism and dyslexia was higher than in the general population, being six times higher for ADHD, four times higher for autism, and 1.5 times higher for dyslexia. The prevalence of mental health disorders was 4.9 times higher amongst people on probation than the general population, with 38% wanting more mental health support.

Survey respondents accessed a GP on a comparative level to the general population, but low proportions accessed a dentist (32%), therapy services (10%), optician (18%) or hospital outpatients (23%). Use of accident and emergency (A&E) services was high with 35% using A&E in the last year, and 23 individuals accessing A&E three or more times each. Inpatient hospital stays were 18%, compared to just 3% in the general population. Smoking rates were high (52%) compared to the general population (13%). However, 56% wanted, or maybe wanted, to have help to quit. Drug use was also high (60% currently using, 39% previously), but only 27% reported having accessed substance misuse services. COVID-19 incidence was higher amongst people on probation (43%) than the general population (27%), with low vaccination uptake (63% first dose), particularly for 2nd (56%) and 3rd (30%) doses.

Respondents resided in the highest areas of deprivation but had access to gardens and green space on a comparable level to the general population. The most common mode of transport was walking, with limited car driving and only half of respondents reporting easy access to public transport. Employment rates (31%) were less than half that of the general population (72%), despite 94% being aged 18-59 years and therefore of typical working age.

The results of this HNA demonstrate that people on probation are likely to have poorer self-reported health than that of the general population, a higher prevalence of unhealthy behaviours, and lower

¹ [National Survey for Wales | GOV.WALES](https://gov.wales/national-survey-for-wales)

usage of health services. Probation cohorts feature little in the literature, with much less known about their health needs than the prison populations. Further research is required to better understand the health needs of people on probation, the impact their health conditions have on their lives, and how engagement with preventative health services can be improved.

2. Introduction

Criminal behaviour is disproportionately linked to deprivation. A large proportion of the probation cohort in Wales will come from areas of the highest deprivation. These populations experience poorer health, a higher chance of death from avoidable causes and fewer years of healthy life expectancy at birth (Public Health Wales, 2021). Addressing inequality is a core value for NHS services in Wales and finding new ways to do this is essential to achieving the ambition of equal health outcomes for all (Welsh Government, 2021).

The health needs of those under probation, and where and how they access health services, is poorly understood. Those under probation who have previously been in prison, are likely to have similar health needs to those in custody for which there is a much stronger evidence base (Harris *et al*, 2006; Sturup-Toft *et al*, 2018). A proportion of the probation cohort will never have been in custody and their health needs are unknown. These populations are typically under-represented in local community needs assessments and strategic commissioning plans (Lloyd 2013).

There are numerous benefits to improving health outcomes for people on probation. Firstly, it will contribute to reducing health inequalities. There is evidence to suggest the health of people on probation is worse than that of the general population. Improving access to health services via probation may help to reduce health inequalities for those under community justice services. Secondly, improving health may help reduce reoffending. Evidence indicates that offenders with serious mental health problems were twice as likely to fail in the community as those without mental health problems (Skeem and Loudon, 2006), and there is a positive correlation between reoffending rates and poor health status (Social Exclusion Unit, 2002; Social Exclusion Unit, 2004). Thirdly, improving health outcomes for those on probation can bring improvements for the wider community by improving health in a cohort often referred to as underserved (Home Office 2004; National Probation Service 2019; Revolving Doors Agency 2017).

To the authors' knowledge, the health needs of those under probation services in Wales has never previously been explored. This work aimed to scope the health needs of a probation cohort in Wales to better understand how they perceive their health, their current health needs and how they access health services in Wales. The findings will inform discussions about how health care delivery and wellbeing support could be better integrated with community criminal justice services in Wales.

2.1 Aims and objectives

The HNA aims to describe the health needs of people under probation supervision of the SNPT PDU. The objectives are as follows:

1. To conduct a rapid literature review using systematic methods to determine what is already known about the health needs of people under probation services.
2. To describe the health needs of people on probation within the SNPT PDU in terms of:
 - a. Accommodation and transport use.
 - b. Physical and mental health conditions.
 - c. Accessing of health services.
 - d. Healthy behaviours.
 - e. COVID-19 symptoms, testing, positive results, and vaccine uptake.
3. To make recommendations to improve the health of people on probation.

3. Background to probation services in England and Wales

The Probation Service in England and Wales is a statutory criminal justice service that supervises offenders released into the community on license and those sentenced to community based sentences. It is an executive agency, sponsored by HM Prison and Probation Service (HMPPS). The Probation Service aims to *“protect the public by the effective rehabilitation of offenders, by reducing the causes which contribute to reoffending and enabling offenders to turn their lives around”* (Probation Service, 2022). It delivers this by maintaining responsibility for sentence management, accredited programmes, unpaid work and structured interventions.

There are six probation delivery units in Wales (Figure 1), with approximately 14,805 people on probation in Wales². Demographically the age distribution is young with 64% of probationers in Wales being under the age of 40 years (Figure 3). Those under probation in Wales are predominantly male (90%) and of white ethnicity (88%). People on probation attend regular supervision sessions with their probation practitioners. These meetings develop, deliver and review plans to address criminogenic needs and routes out of offending whilst reducing risk of serious harm. Supervision continues until sentence expiry, or the legal requirement to supervise an individual ends.

Those on probation fall within two definitions of supervision:

- Those sentenced to community or suspended sentence orders – *these orders can have the effect of restricting liberty whilst providing punishment in the community, rehabilitation and/or ensuring reparative activities are undertaken.*
- Those released from prison on license – *a custodial sentence should only be imposed where a community order could not provide sufficient restriction while addressing rehabilitation and preventing future crime.*

3.1 Overview of Swansea Neath Port Talbot Probation Delivery Unit

The probation delivery unit participating in this HNA was the Swansea Neath Port Talbot Probation Delivery Unit, which covers all of Swansea, Neath and Port Talbot local authority areas in south east Wales. As of October 2022, there were 2,202 people under the supervision of this unit with approximately 2,957 supervision sessions taking place each month. Around 40% of the caseload serve community sentences and a quarter are on post-release supervision³. The age distribution of the SNPT PDU is shown in Figure 3 with the majority (57%) being between 21 and 39 years of age. Men represent 89% of the caseload with just 11% being female. Ninety percent of the caseload is of white ethnicity.

² Data as of 5/10/22 from personal communication with HMPPS in Wales

³ Data as of 14/11/22 received from personal communication with HMPPS in Wales

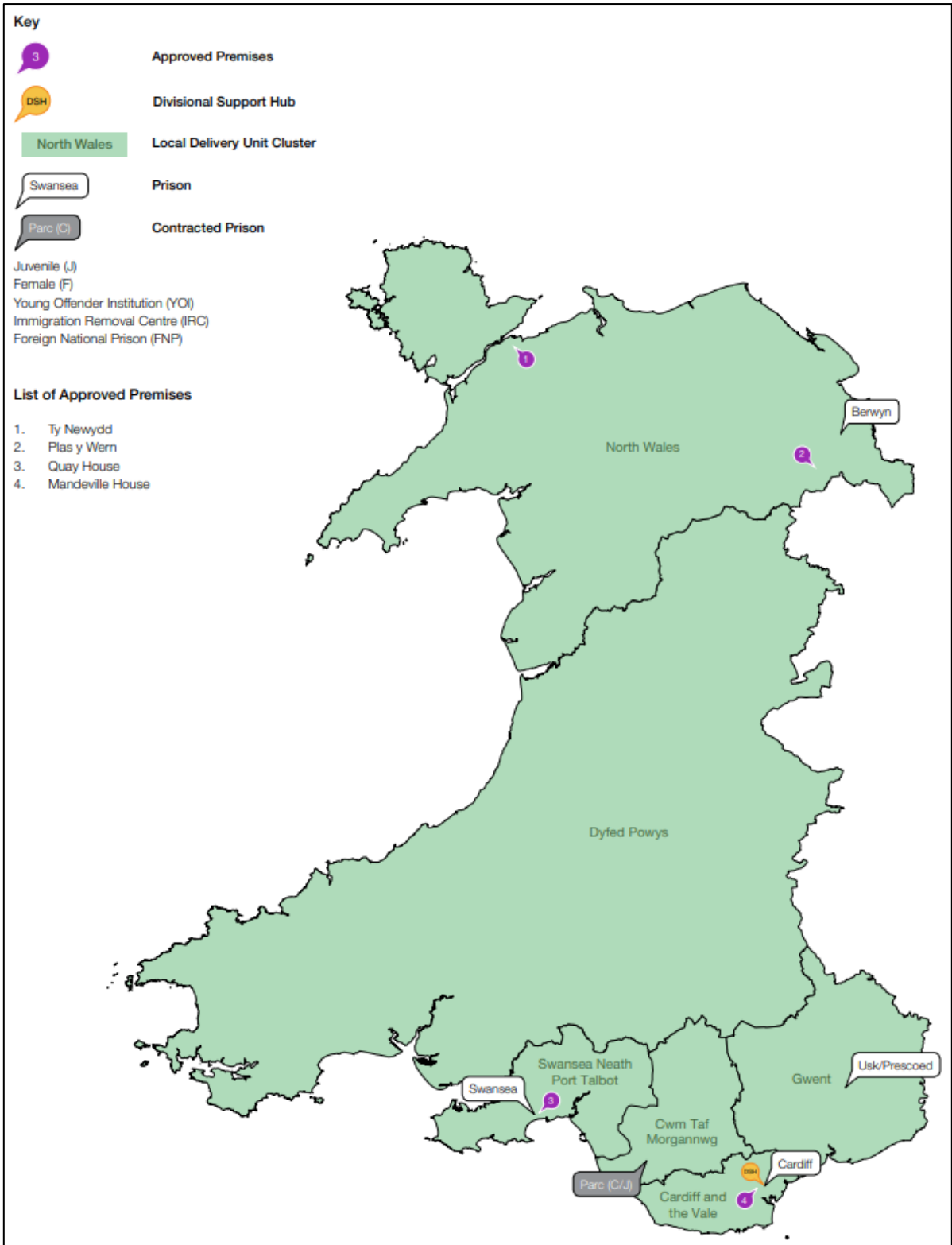


Figure 1: Map of Wales indicating the six Probation Delivery Unit areas⁴

⁴ [HM Prison & Probation service and National Probation Service Wales Division Map \(publishing.service.gov.uk\)](https://publishing.service.gov.uk)

4. Literature review of the health needs of probation populations

4.1 Method

A rapid literature review was undertaken to establish what was already known about the health needs of people on probation locally, nationally and internationally. Literature searches were conducted in September 2022 using Medline, Embase, APA Psycinfo, British Nursing Index, and Allied and Contemporary Medicine. Key words were entered using Boolean operators to ensure results were in keeping with the research aims (see Table 1). Inclusion criteria were:

- Papers in the language of English only
- Papers that describe the health of people on probation
- Papers published in any year

Initial papers identified were screened by title, abstract and full text. This ensured the remaining papers met the eligibility criteria. A full outline of the papers identified at each stage is outlined in Figure 2.

POPULATION	INTERVENTION	OUTCOME
Offenders	Probation	Health Need
Keywords: Offenders Individuals Probation* Adults Combine all terms with OR	Keywords: Probation Community service Parole Combine all terms with OR	Keywords: Health Wellbeing Combine all terms with OR
	AND	
		AND

Table 1: search terms used under the PICO framework.

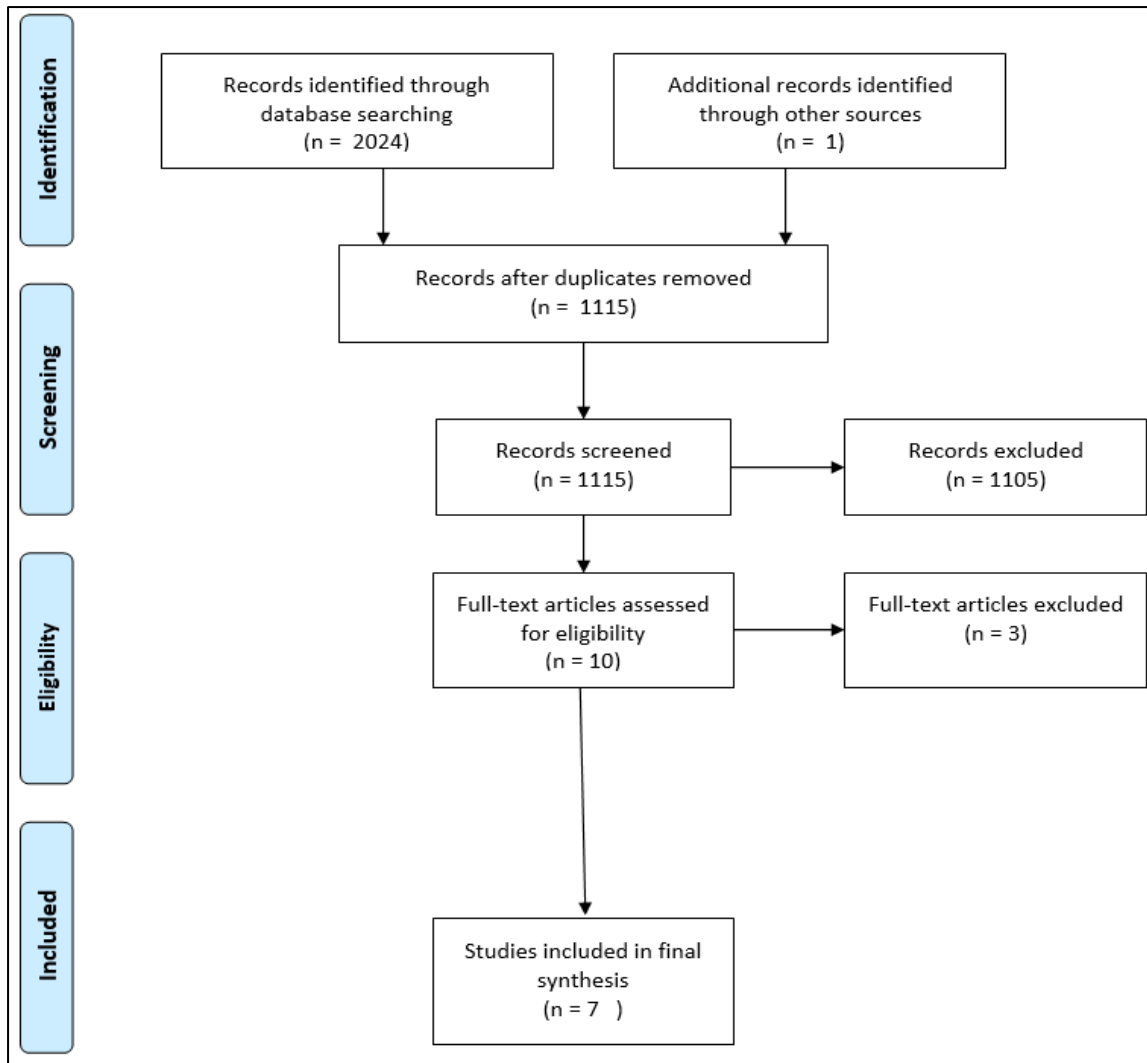


Figure 2: PRISMA flow diagram of the number of papers identified at each stage of the literature search.

4.2 Literature review search results

The initial search identified 2,024 records with one further record identified via snowballing from another reference taking the total to 2,025. This reduced to 1,115 records following removal of duplicates. These were screened by title and abstract to identify only those that described the health of people on probation. At this stage 1,105 records were excluded, due to being media articles, commentary pieces or letters, non-primary studies, or irrelevant to the health of people on probation. Ten full-text articles were assessed for eligibility, three of which were excluded due to not being descriptions of the health of people on probation. Seven studies remained for inclusion in the literature review (Table 2).

Of the final studies, three were from the UK and four were from the USA, with three being cross-sectional studies, three being surveys, and one being a cohort study. Sample sizes of people on probation ranged from 100 to 5,873. The majority of the participant samples were male, with four of the studies featuring 81% or higher male participants.

Authors (date)	Country	Study design	Final probation sample size	% of sample that were male	Sample age (years)	Health areas featured
Brooker <i>et al</i> (2008)	UK	Survey	183	83%	Mean 33	Physical health, mental health, alcohol use, substance misuse, sexual health, service access.
Bryson <i>et al</i> (2019)	USA	Cross-sectional	379	54%	50 or older	Mental health disorder prevalence and service access.
Hatfield <i>et al</i> (2004)	UK	Cohort	533	90%	18-80	Mental health problem prevalence, physical condition, drug misuse, alcohol misuse, learning disability.
Hawks <i>et al</i> (2020)	USA	Cross-sectional	3685	68%	18-49	Mental health, physical health, alcohol use, substance misuse, smoking.
Mair and May (1997)	UK	Survey	1213	82%	16+	Mental health, physical health.
Olson <i>et al</i> (2021)	USA	Cross-sectional	5873	81%	Mean 36	Mental health, physical health, substance misuse
Owens (2011)	USA	Survey	100	52%	Mean 35	Mental health problem prevalence and service access.

Table 2: Summary of the study characteristics of the seven papers included in the literature review.

4.3 Findings from the literature review

The demographics of people on probation, as identified from the literature, were mostly male (52% - 90%), between ages 16 to 80 years of age, with average ages of 33-36 years (Brooker *et al*, 2008; Bryson *et al*, 2019; Hatfield *et al*, 2004; Hawks *et al*, 2020; Mair and May, 1997; Olson *et al*, 2021; Owens, 2011). The literature demonstrated high rates of unemployment amongst the probation cohort with between 38-79% reporting to be unemployed. (Olson *et al*, 2021; Owens, 2011; Mair and May, 1997). The studies identified covered a wide range of health issues. All studies included mental health, six studies considered physical health and four included substance use. Three looked at access to health services and only one study considered learning disabilities.

Overall, the general health of those under probation was found to be worse than the general population. Mair and May (1997) conducted a survey of people on probation in the UK (n=1213) where 49% of respondents reported health problems lasting 6 months or more. This was believed to

be a similar incidence to the long-term health problems of those in prison. A pilot health needs assessment from Nottinghamshire and Derbyshire concluded that offenders' health was overall significantly worse than the general population and worse than the lowest socio-economic group of the general population. Differences between the health needs of those on probation to those in prison were noted including higher rates of substance use for probation cohorts (Brooker *et al*, 2008).

4.3.1 Physical health

Six of the studies considered the physical health needs of those under probation. A cross-sectional study by Hawks *et al* (2020) used data from the National Survey for Drug Use and Health, finding that 31% of people on probation had a physical condition burden, which was higher than the general population. This study featured a large sample (n=3,685), but excluded those aged 50 years and over, and as it is based in the United States may not be representative of the UK population of people on probation.

Olson *et al* (2021) conducted a cross-sectional study and similarly found 35% of participants had at least one chronic physical health condition. The American study excluded individuals who did not qualify for healthcare plans, potentially excluding those with higher incomes and social status, and conditions were self-reported rather than based on formal diagnosis, so may have suffered from response bias.

Probation cohorts resident within UK approved premises were found to have lower rates of physical health problems than studies investigating wider community probation cohorts. Hatfield *et al* (2004) found that 19% of people living within probation run approved premises had one or more physical problems.

4.3.2 Mental health

All of the studies investigated prevalence of mental health problems, with rates of self-reported mental health problems and disorders ranging from 14% to 75% (Bryson, 2019; Hatfield *et al*, 2004; Hawks *et al*, 2020; Mair and May, 1997; Olson *et al*, 2021; Owens, 2011). The majority of studies concluded that there were higher rates of mental health problems amongst people on probation than amongst the general population (Bryson *et al*, 2019; Hatfield *et al*, 2004; Hawks *et al*, 2020; Olson *et al*, 2021).

A cohort study by Hatfield *et al* (2004) focused on residents on probation at seven approved premises (one of which was specifically for males with mental health problems). Known mental health diagnoses were identified amongst 25% of participants (n=533), with a further 5% having a probable mental health problem.

A cross-sectional study by Bryson *et al* (2019) aimed to compare the prevalence of serious or moderate mental illness amongst people on probation compared to those not on probation. They used data from the 2008-2014 US National Surveys for Drug Use and Health, focusing on adults aged 50 years or older. The final sample featured 379 people on probation who had been on probation in the 12 months prior to survey completion. They found that the prevalence of serious or moderate mental illness amongst people on probation was higher compared to all other adults (21% vs 7%).

4.3.3 Health behaviours

The health behaviours that were investigated in the studies included smoking (Brooker *et al*, 2008; Hawks *et al*, 2020), drug use (Hatfield *et al*, 2004; Hawks *et al*, 2020; Olson *et al*, 2021) and alcohol use (Hatfield *et al*, 2014; Hawks *et al*, 2020), all of which suggest higher rates amongst probation populations than those within the general community. Brooker *et al* (2008) found that 83% of people on probation smoked, which was higher than the 37% of smokers identified by Hawks *et al* (2020). Alcohol misuse was identified amongst 31% (Hatfield *et al*, 2004) and 22% (Hawks *et al*, 2020) of people on probation.

Hatfield *et al* (2004) found drug misuse problems amongst 35% of their sample, which was the same as found in the study by Hawks *et al* (2020), with both concluding that drug misuse rates were higher amongst people on probation than the general population. Olson *et al* (2021) found even higher rates of 67%. Brooker *et al* (2008) identified that rates of alcohol and drug misuse, and suicidality amongst community offenders was higher than prisoner populations.

4.3.4 Access to healthcare services

Access to health services by people on probation was included in the health needs assessment by Brooker *et al* (2008). They found that in the last 12 months, 80% of community offenders had accessed their GP, 55% had accessed a dentist, 39% had attended accident and emergency, 26% had seen an optician, 14% had an inpatient hospital stay, 12% had accessed a therapy service, and 27% had attended an outpatient hospital consultation. Mental health services had been accessed by 27%. They concluded that people on probation tend to over-use crisis services such as accident and emergency, but have little input in terms of health promotion and preventative healthcare (Brooker *et al*, 2008).

Healthcare service access in other studies looked only at mental health services, with 54% of people on probation seeking mental health support in the previous year (Owens, 2011). Within the US studies, reasons given for not seeking mental health support included affordability of care and not having health insurance. There are also limitations of selection and response bias amongst participants of the study, as it is not known if there were significant differences between those choosing to participate and those who did not (Owens, 2011).

More frequent use of mental health services was identified by Bryson *et al* (2019) who found that 81% of those on probation with a mental health illness had received mental health treatment in the previous year. However, it is not known how many further people on probation in this study may have had undiagnosed mental health problems, as the measure of those accessing services was only of those with a formal diagnosis.

4.3.5 Literature review conclusions

There is limited published evidence available regarding the health needs of people on probation. That which is available has primarily focused on mental health problems, which are reported as consistently higher amongst those on probation than the general population. The same is also true of physical health conditions, where included, and self-reported general health. Despite an increased prevalence of health conditions, the limited evidence available suggests that people on probation access healthcare services at a lower rate than the general population. The overall picture is that of an under-researched group with poor health and low accessing of healthcare services.

5. Questionnaire

A survey was designed to better understand the health needs of people under the SNPT PDU. The survey was made available on the digital platform SmartSurvey™⁵. Service users were encouraged by probation staff to take part in the survey.

5.1 Design

The questionnaire aimed to capture a broad overview of the health needs of people on probation, highlighting areas for further interrogation. To enable comparison with the general population, the questionnaire was based on themes covered by the National Survey for Wales April 2021-March 2022⁶ that included:

1. About you – demographics, prison history, employment status.
2. Accommodation – living arrangements, green space access, facilities
3. Transport – access and use.
4. Health – general health, physical and mental health, service access, healthy behaviours.
5. COVID-19 – symptom, test and diagnosis history, vaccination status.
6. Health services – registration and use over the last year.

Several questions were taken directly from the National Survey for Wales (questions 16, 19 and 40). Others questions were designed in collaboration with HMPPS in Wales. The full questionnaire is presented in Appendix 1.

5.2 Implementation

The questionnaire was made available to all people attending the SNPT PDU between 16th May and 15th June 2022. Probation practitioners were able to access the Smartsurvey™ and encourage completion during supervision sessions. The questionnaire was completed directly onto the online survey with the support of probation practitioners, or on a paper version that was inputted later, (not all of the PDU rooms had sufficient internet connectivity for completing the form online). The probation practitioners completed a very small number of questionnaires over the phone with service users.

5.3 Analysis

Data from the questionnaire was uploaded into excel for analysis. Where possible, comparisons were made with results from the National Survey for Wales. Contextual demographic data describing the probation cohort within the SNPT PDU was provided directly by HMPPS in Wales.

Where provided, postcodes were mapped against the Welsh Index of Multiple Deprivation (WIMD) using the 'Postcode to WIMD Rank Lookup' provided by StatsWales⁷.

⁵ [Online Survey Software and Questionnaire Tool - SmartSurvey™](#)

⁶ [National Survey for Wales | GOV.WALES](#)

⁷ [Welsh Index of Multiple Deprivation \(gov.wales\)](#)

5.4 Results

The number of people on probation in the SNPT PDU during the survey period was 1,573. There were 257 surveys completed in full, which is 15% of this population.

5.4.1 Demographics of respondents

The age demographics of survey respondents were very similar proportionally to those of the SNPT PDU population and the wider Wales probation population (Figure 3). Of the 257 respondents, the majority were aged 21-49 years of age (82%). All respondents were aged under 80 years.

The majority of respondents (96%) were of white ethnicity. The ethnicity demographic of SNPT PDU is 90% White, and for Wales' probation population 88% White. Other ethnic backgrounds reported included Asian, Mixed and Black (these numbers are not included to avoid potential identification of participants due to small numbers in these groups).

The majority of respondents described their gender as male (93%), with 7% as female. The proportion of males in the SNPT PDU population is 89% and for Wales' probation population is 90%.

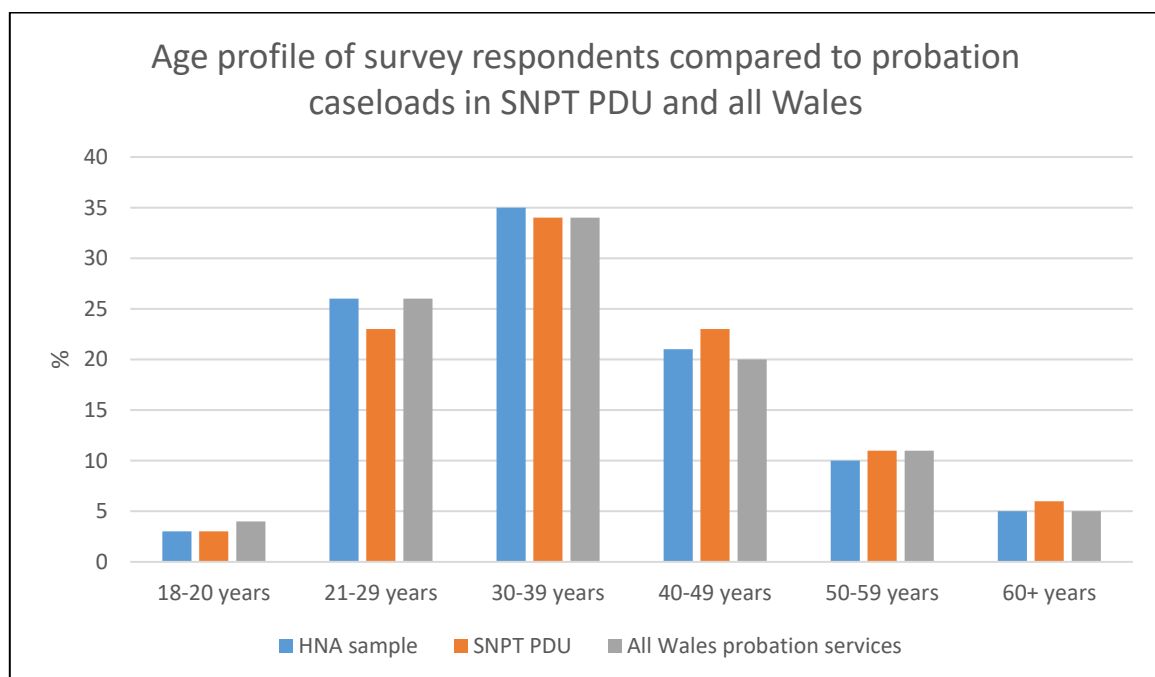


Figure 3: Age profile of survey respondents (n=257) compared to SNPT PDU caseload (n=2202), and all those on probation in Wales (n=14,805).

5.4.2 History of incarceration

The majority of the respondents reported to be under a community order supervision (n=137, 53%), with 98 (38%) under post-release supervision. This is consistent with the SNPT PDU caseload where around 40% are serving community sentences and 25% are on post-release supervision⁸.

Of the 257 respondents, 40% had been in prison within the last 12 months and 70% reported having ever been in prison. Of these, 19% (n=49) had been in prison once, 13% (n=33) had been in twice, and 30% (n=76) had been in three or more times (Figure 4). Just under 40% of respondents reported never having been in prison.



Figure 4: Proportion of respondents who had ever been in prison

5.4.3 Employment and education

Survey responses demonstrated low levels of engagement with education and employment. Just under a third of respondents reported being in employment, a much lower rate than the 74% national employment rate for Wales (Welsh Government, 2022). Nine percent reported being in training or education, 3% had a volunteering role and 11% were completing community service (Figure 5). Overall, 46% of respondents were not involved in any form of training or work, whether paid or voluntary. This is significantly higher than the 3.4% unemployment rate for the general population in Wales (Welsh Government, 2022).

⁸ Figures as of 14/11/22 received from personal communication with HMPPS in Wales

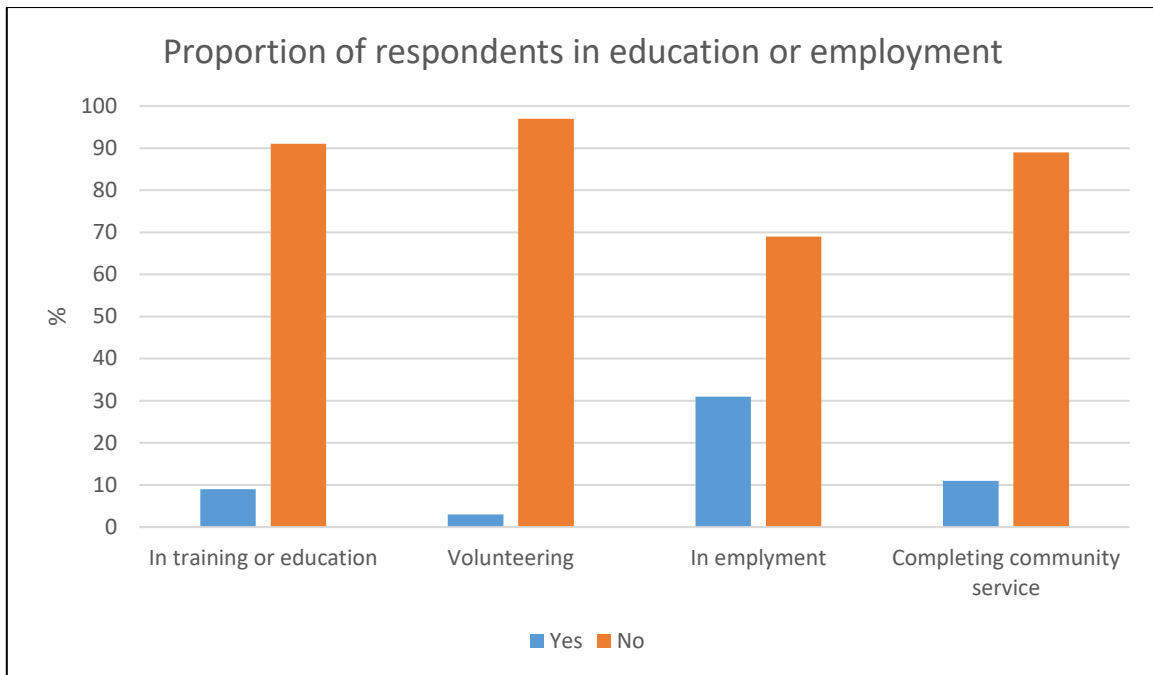


Figure 5: Proportion of respondents in training or education, volunteering, employment, or completing community service

5.4.4 Area of residence by deprivation quintile in Wales

Complete postcodes of residence were provided by 61% (n=157) of respondents. These were mapped against WIMD quintiles as outlined in figure 6. The majority of respondents (49%) were living in the highest areas of deprivation in Wales (WIMD quintile one). Only a low number of respondents (13%) resided in areas of low deprivation (quintiles 4 and 5).

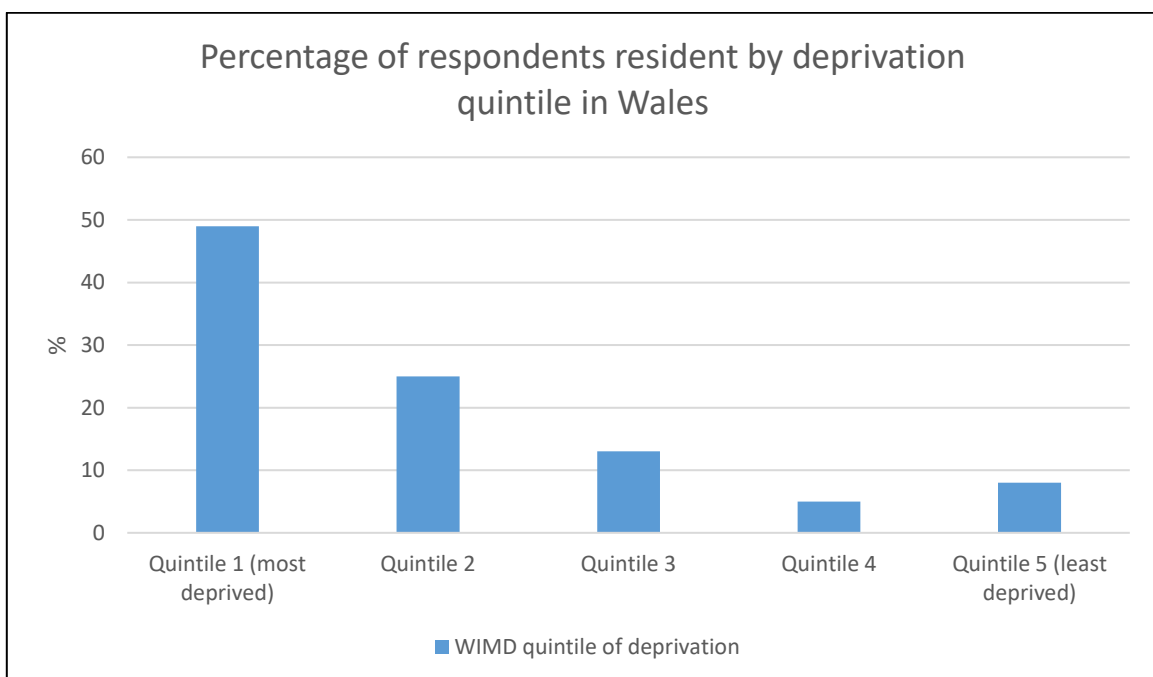


Figure 6: Proportion of respondents residing in each WIMD quintile

5.4.5 Living situation

The majority of respondents either lived with family or dependents (43%) or alone (39%) (Figure 7). Eleven percent lived in shared accommodation, with 53% reporting sharing bathroom or kitchen facilities with others.

Access to an outdoor area or garden at home was reported by 70% of respondents, slightly lower than the general population in Wales who reported 94%. A similar proportion of people on probation (88%) to the general population (86%) reported being able to access green space, such as parks, within walking distance from home.

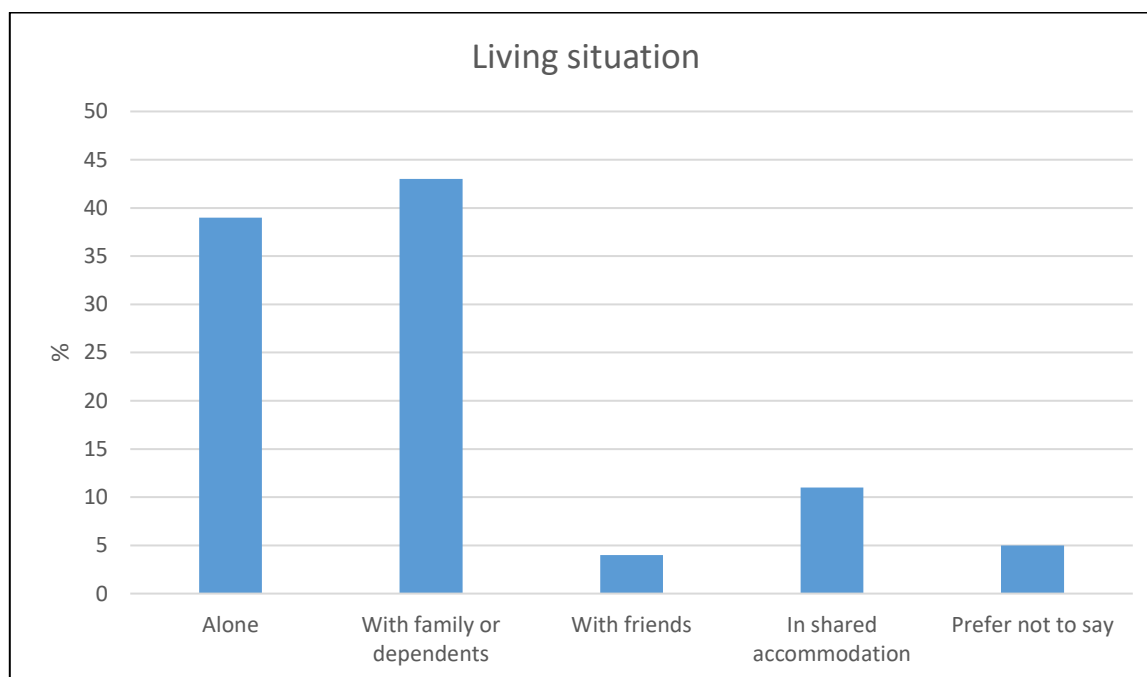


Figure 7: Percentage of respondents living alone, with family or dependents, with friends or in shared accommodation

5.4.6 Transport

Walking (59%) or bus (39%) were reported as the most frequently used modes of transport (Figure 8). Just under a third (32%) drove a car and 23% were driven by another person (non-taxi). These percentages are lower than the general population for Wales where 88% report having access to a car. Just over half of respondents (51%) reported that accessing public buses or trains was easy, whilst 24% reported access as difficult.

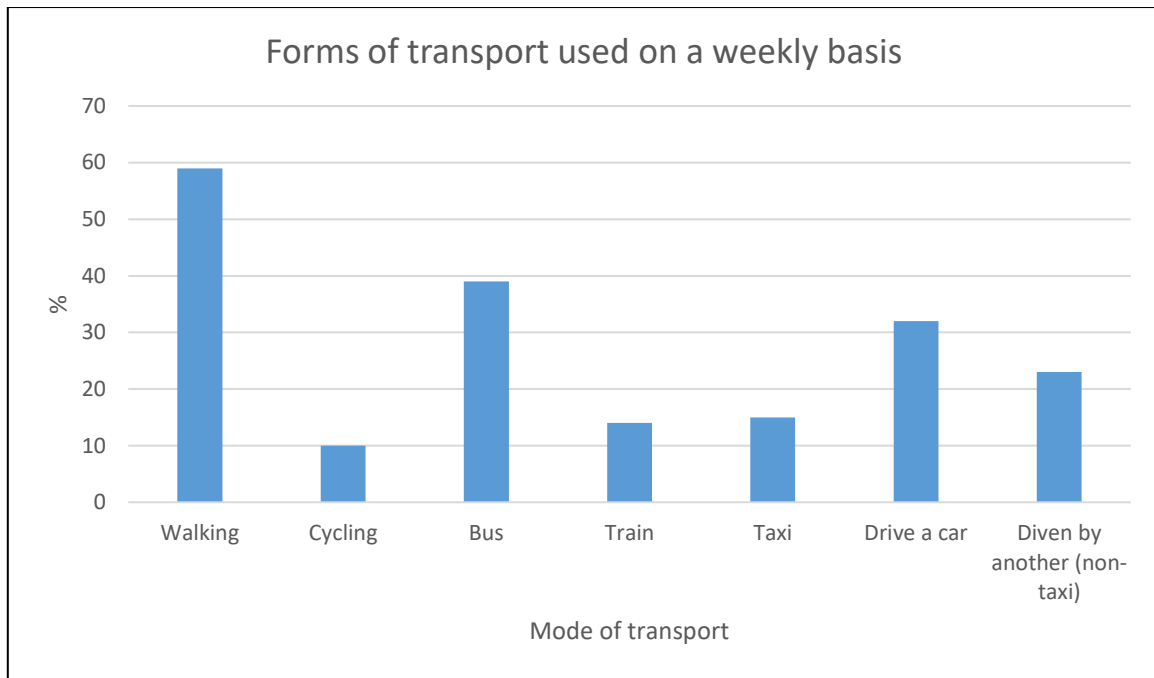


Figure 8: Proportion of respondents using different forms of transport on a weekly basis

5.4.7 Self-reported levels of health and expectations for future health

Respondents were asked how they perceived their own health now, how it compared to their health a year ago, and their expectations for their health in a year's time. Perceptions of own health were more likely to be fair, bad or very bad compared to the self-reported health of the general population of Wales. Just under half of those on probation reported their health as very good or good compared to 72% of the general population of Wales (Figure 9). Higher proportions of the probation cohort described their health as fair (35%) or bad or very bad (16%) compared to the general community who reported 19% and 8% respectively.

Compared to a year ago, the majority of respondents reported their health as the same or better (74%). Just over a quarter (26%) felt their health had deteriorated since the previous year (Figure 10). Expectations for future health were generally optimistic with over half (55%) expecting their health in a year's time to be much better or somewhat better. Only 10% expected their health to be worse in the coming year (Figure 10). When asked if they would like to improve their health 78% of respondents responded with yes, 14% no and 8% were not sure.

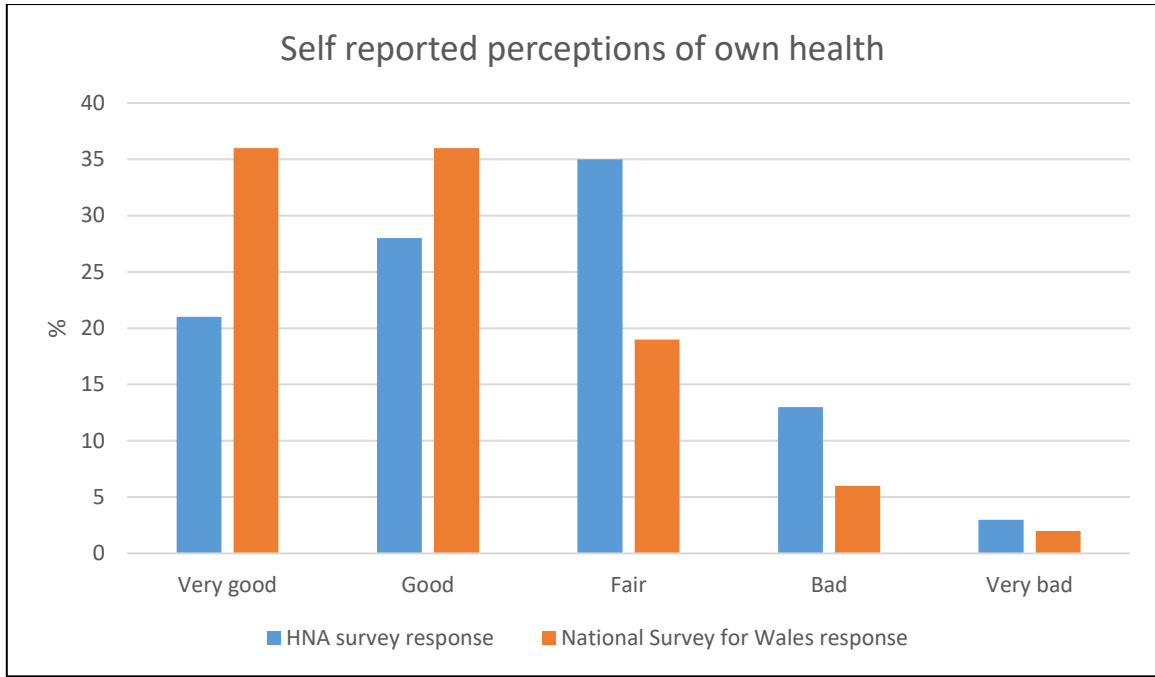


Figure 9: Self-reported levels of health for people on probation (n=257) compared to the general population of Wales

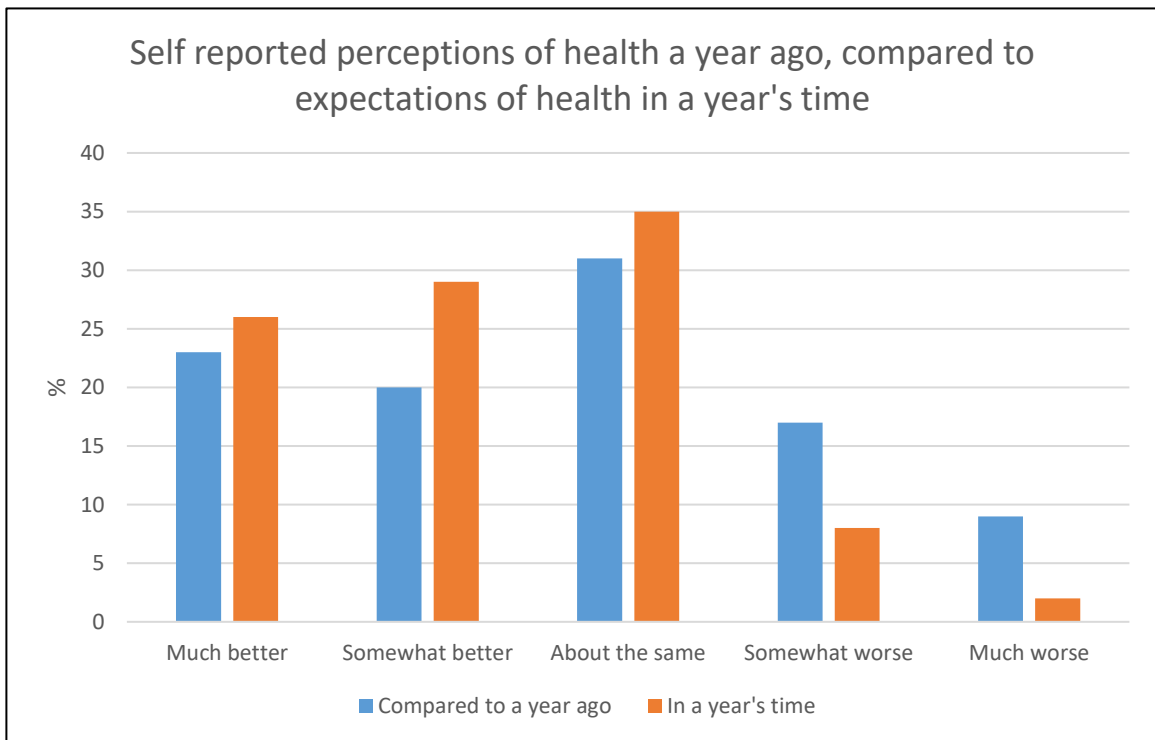


Figure 10: Descriptions of health a year ago (blue columns) compared to expectations of health in a year's time (orange columns), as percentages of respondents

5.4.8 Known diagnosis of physical or mental health conditions

Respondents reported a relatively high burden of poor health and discomfort. When asked if they had any long-standing illnesses, 46% reported one or more (Figure 11). Similarly, 41% reported experiencing moderate or severe pain in the two weeks prior to completing the survey, with a further 21% reporting minimal pain in the same period (Figure 12).

Over a third of respondents (39%) reported having a diagnosed physical health condition (Figure 13). Rates of confirmed mental health conditions were higher with just under half of respondents (49%) reporting a diagnosed mental health condition and a further 13% believing they had a mental health condition (Figure 14). Rates of reported mental health conditions were significantly higher than prevalence for the wider population of Wales that reported at just 10%.

Regarding formal diagnosis of certain conditions, just under a quarter (21%) reported having ADHD, 4% reported having autism, and 15% being dyslexic (Figure 15). Such rates are significantly higher than equivalent percentages for the UK general population that are estimated to be 3-4% for ADHD (National Institute for Health and Care Excellence, 2021), 1% for autism (National Autistic Society, 2022) and 10% for dyslexia (National Health Service, 2022).

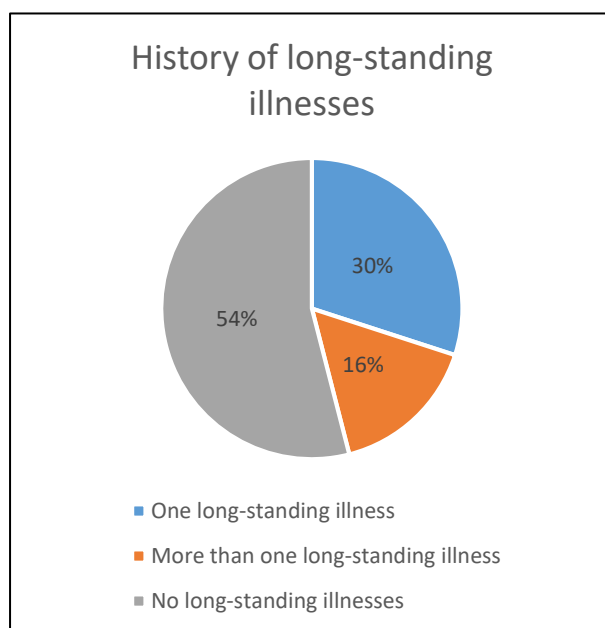


Figure 11 – Percentage of respondents reporting a history of long-standing illnesses

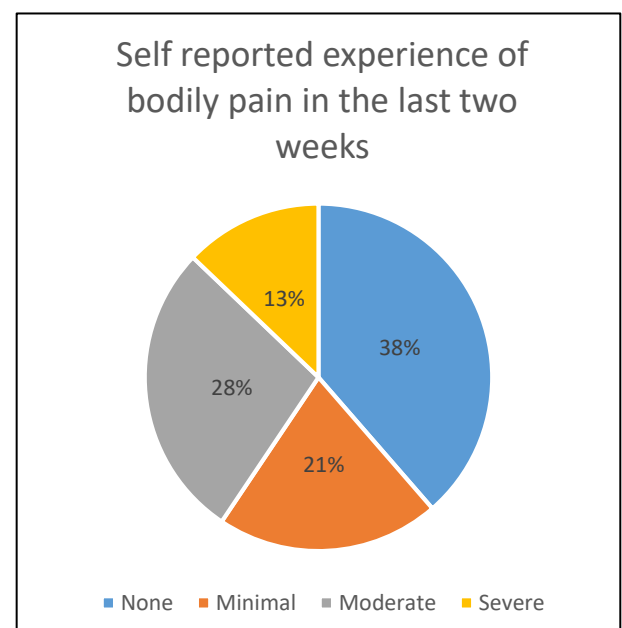


Figure 12 – Percentage of respondents reporting levels of pain within the last two weeks

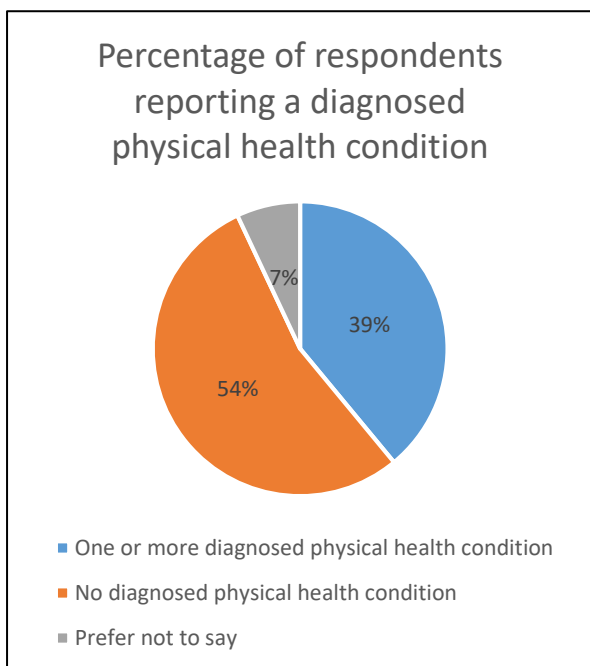


Figure 13 – Percentage of respondents reporting a diagnosed physical health condition

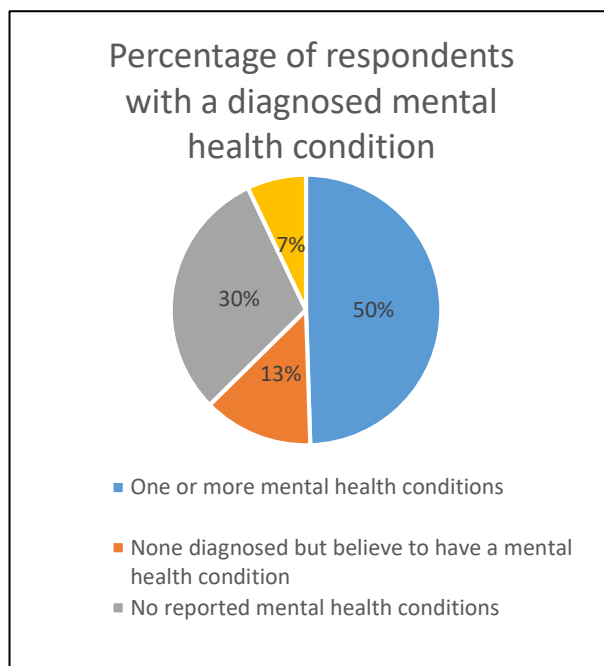


Figure 14 – Percentage of respondents reporting a diagnosed mental health condition

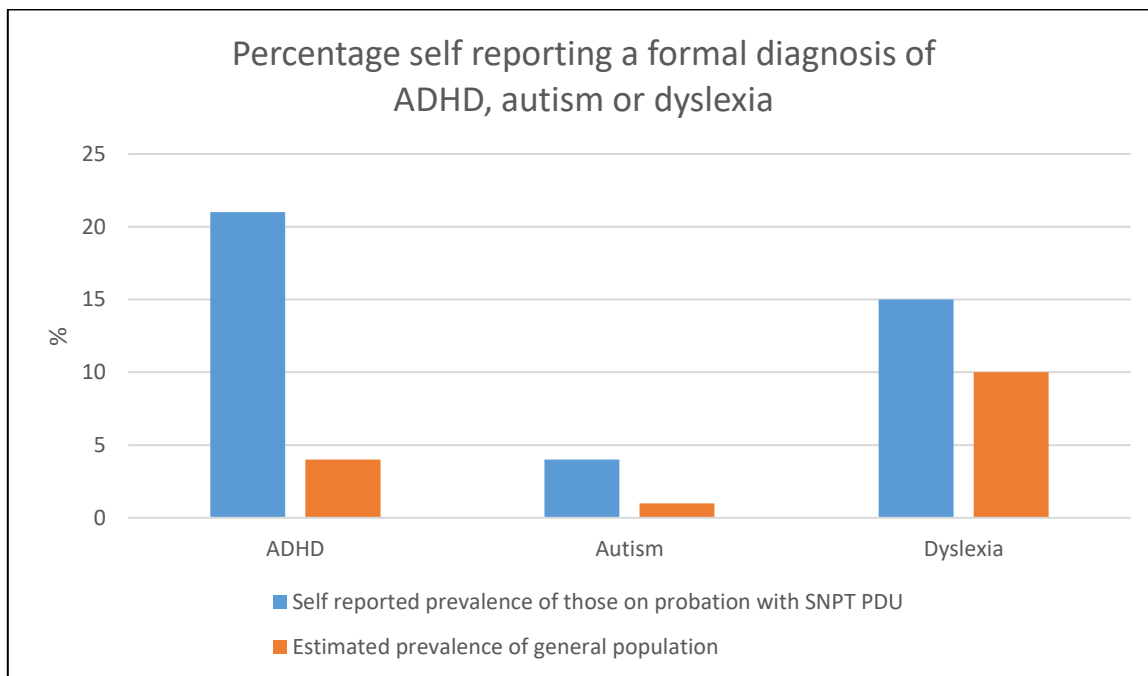


Figure 15: Prevalence of ADHD, autism and dyslexia amongst people on probation compared to estimated prevalence amongst the general population

5.4.9 Accessing support for physical and mental health conditions

Rates of referrals to mental health services mirrored the high self-reporting of mental health conditions. Over half the probation cohort (57%) reported having ever been referred to mental health services. Of these, 76% had attended, 18% were awaiting an appointment, and 6% did not attend their appointment.

When asked about whether mental health support met current needs, just under a quarter (23%) reported wanting more help than they were currently receiving (Figure 16). Interestingly, 15% stated they didn't access support but would like to. Nine percent reported choosing not to access support.

Eighteen percent of respondents accessed adequate support for their physical health conditions with the same number wanting more help than they were currently receiving. Eight percent reported needing support for physical conditions but being unable to access it.

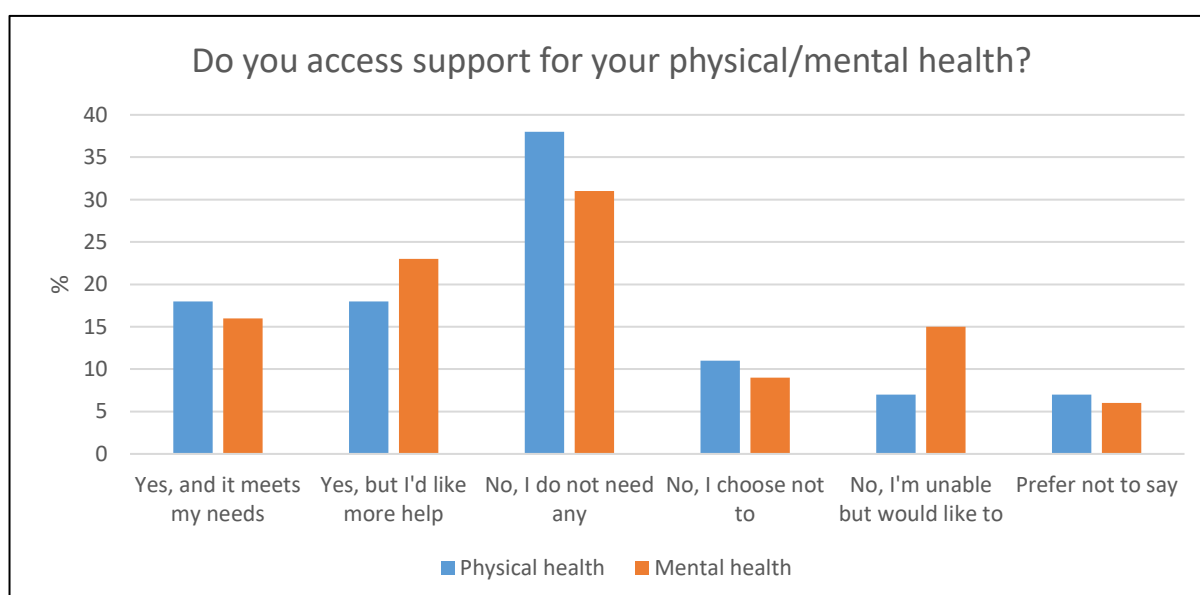


Figure 16: Proportion of respondents accessing support for their physical and mental health needs

5.4.10 Healthy behaviours

The survey asked about current and previous use of tobacco, alcohol, drugs and anabolic steroids (Figure 17). Rates were highest for smoking tobacco where over half (52%) reported current use compared to just 13% of adults reported to currently smoke in Wales. Use of e-cigarettes was slightly lower for the probation cohort (12%) compared to the general population (14%). Forty-three percent reported drinking alcohol although this does not necessarily report problematic usage. Twenty-one percent reported currently using drugs. Whilst no-one reported current use of anabolic steroids, 15% claimed to have used them previously.

Of those on probation who smoked, over half indicated they would like to quit smoking, or would consider quitting (54%) (Figure 18). Despite this, a high proportion (36%) of those who had previously been offered advice to quit smoking, chose not to take up this advice (Figure 19).

Regarding diet, the majority of respondents (67%) reported eating fruit or vegetables daily or on most days. Just over a quarter consumed vegetables or fruit less than once a week and seven percent claimed to never eat them (Figure 20). The majority of the probation cohort undertook exercise daily or on most days (64%). A quarter exercised less than once a week and eleven percent claimed never to exercise (Figure 21).

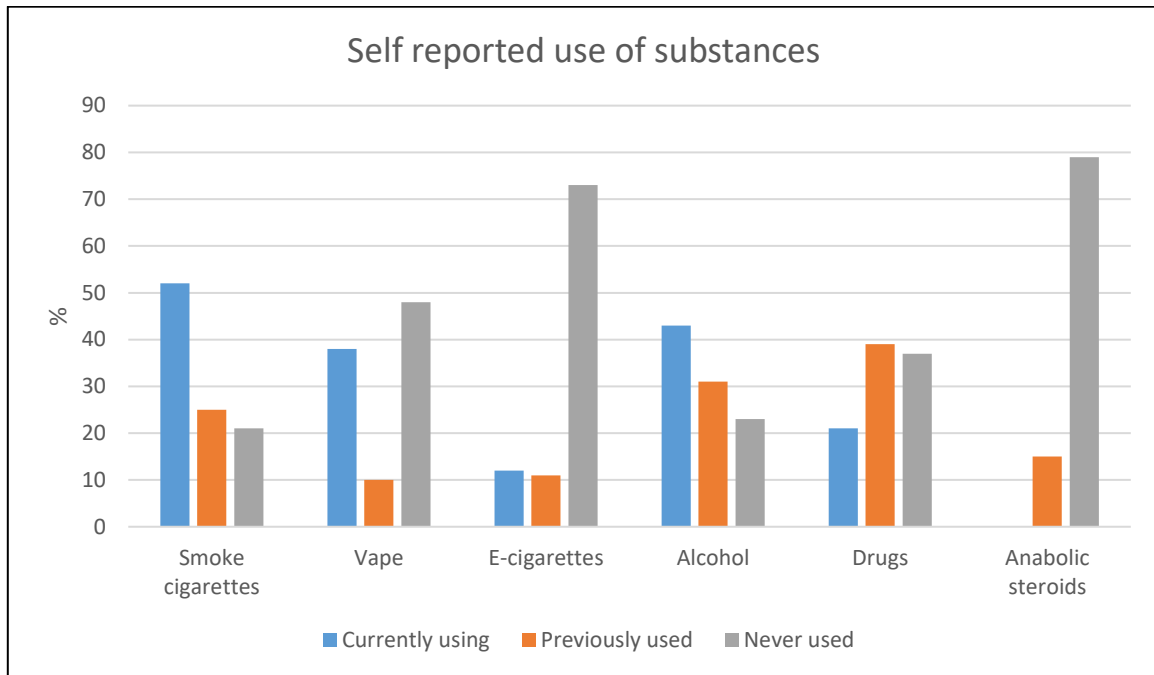


Figure 17: Proportion of respondents reporting use of substances

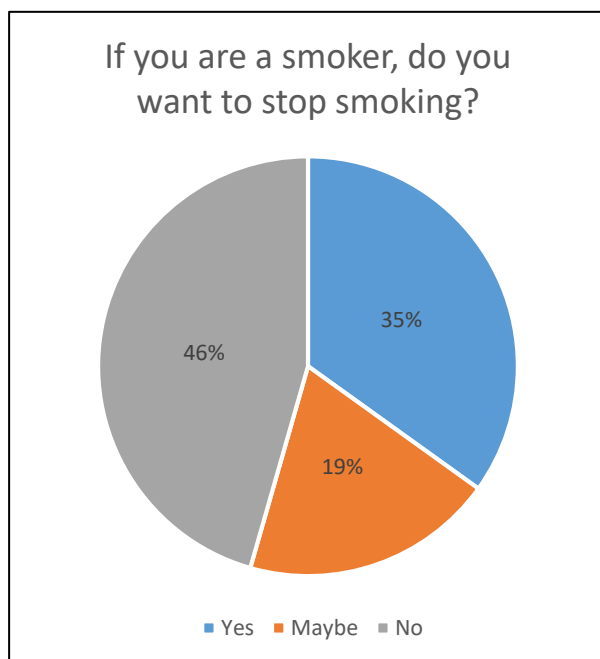


Figure 18 – Proportion of smokers who would like to stop smoking

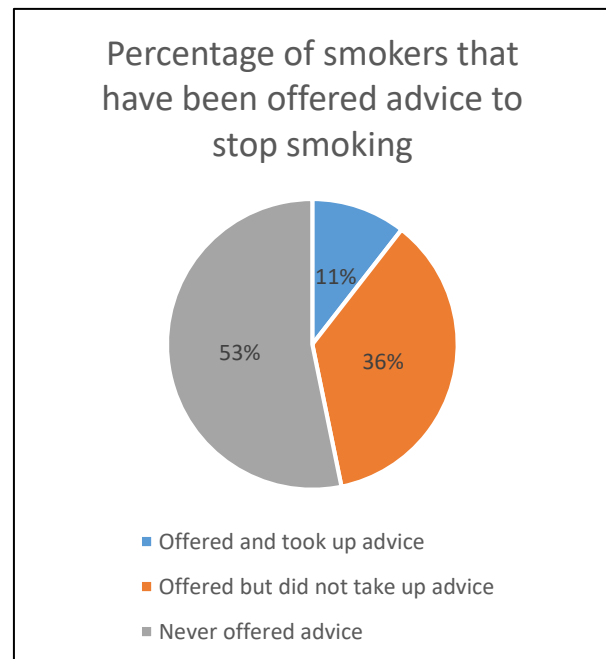


Figure 19 – Proportion of smokers that have been offered advice to stop smoking

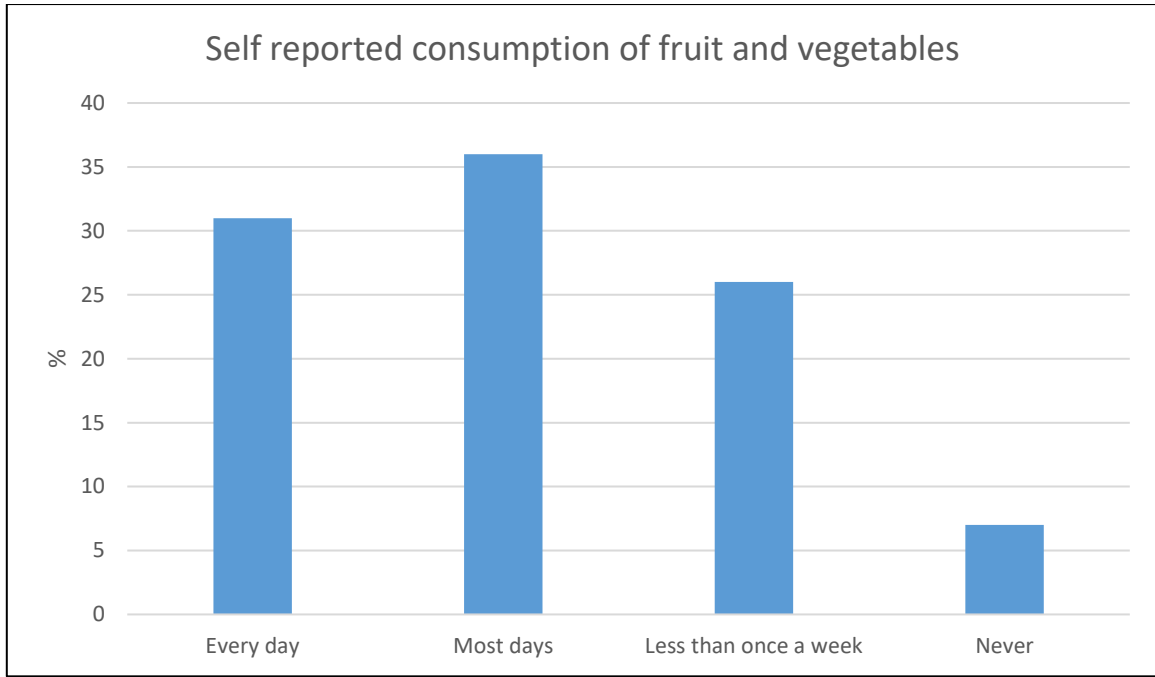


Figure 20: Percentage of respondents reporting eating of fruit or vegetables, by frequency

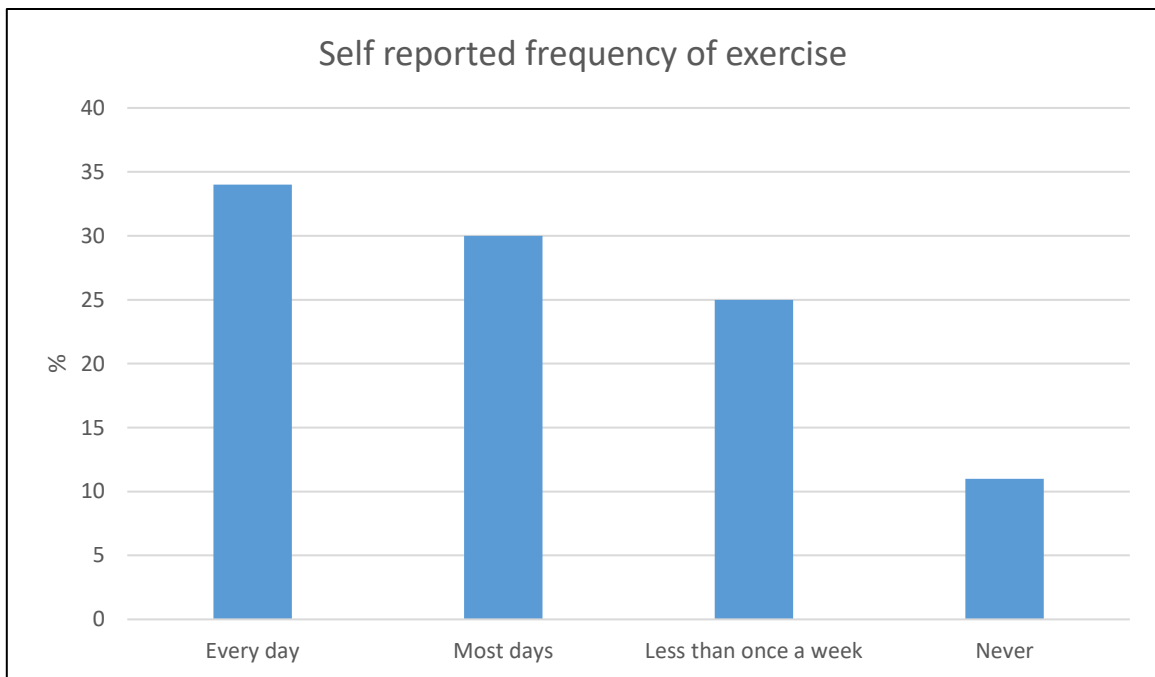


Figure 21: Percentage of respondents reporting frequency of exercise, by frequency

5.4.11 COVID-19

Respondents were asked about their history of COVID-19 symptoms, testing, and vaccinations. Just under half (48%) reported having had symptoms of COVID-19 (cough, loss of taste/smell, fever) since January 2020. Seventy-five percent had been tested for COVID-19, and 43% had received a positive result for COVID-19. The cumulative incidence of COVID-19 in Wales as of 22nd September 2022 was

27% (UK Government, 2022), suggesting a higher incidence of COVID-19 amongst people on probation than amongst the general population.

Of the 257 respondents, 63% reported having had at least one dose of the COVID-19 vaccination, with 56% receiving at least two doses, and 30% having received three doses (Figure 22). The COVID-19 vaccine uptake rate amongst people on probation is therefore significantly lower than in the general population.

Of those that had received a vaccination, 34% received it whilst in prison and 66% at a mass vaccination centre. Just over a quarter (28%) reported not wanting to be vaccinated, and 2% stated they were not vaccinated but would like to be.

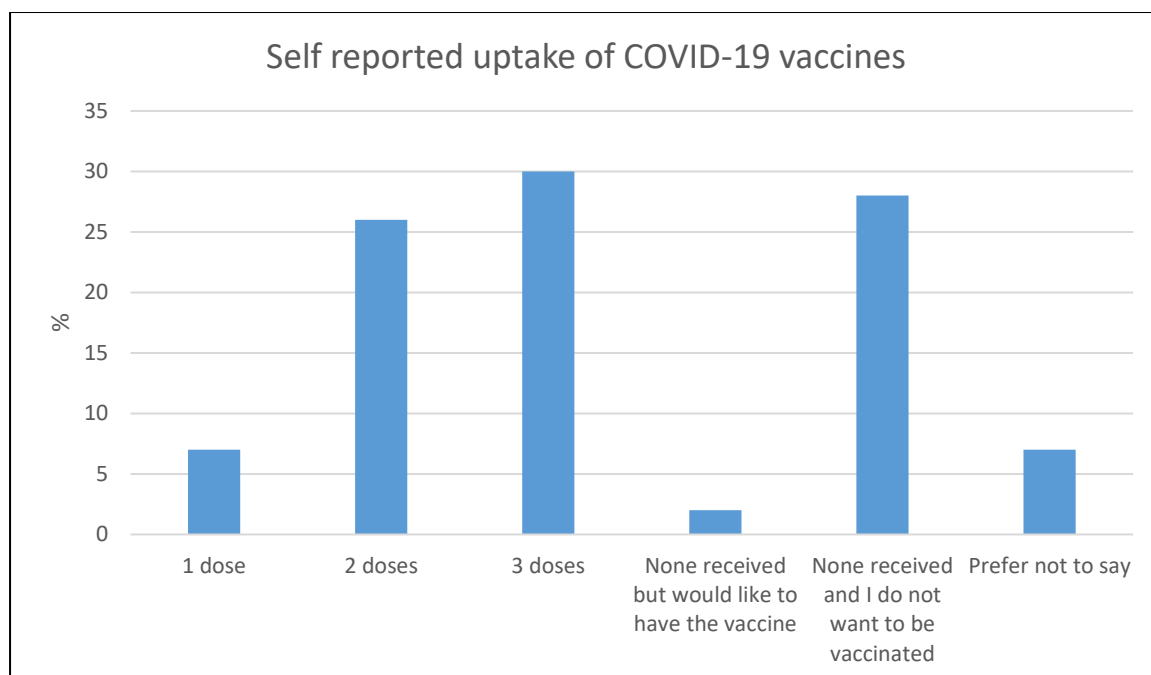


Figure 22: Proportion of respondents receiving COVID-19 vaccinations

5.4.12 Health service access

The survey asked about access and usage of a variety of health care services (Figure 23). The majority of the probation cohort (93%) were registered with a GP and 70% had seen their GP in the last year. This is higher usage than the general population where 58% had seen their GP in the previous year. Registration with a dentist was much lower (48%) with 32% reporting seeing a dentist in the previous 12 months, which compares to 44% in the general population.

Seeing an optician in the last year was reported by 18% compared to 33% of the general population. Therapy services (such as physiotherapy, occupational therapy or speech and language therapy) were accessed by 10% of respondents in the previous year, compared to 15% of the general population.

Usage of emergency services was high amongst the probation cohort. Over a third of respondents (35%) reported attending accident and emergency departments at least once in the last year, with 9% accessing them on three or more occasions. Overnight inpatient hospital stays were similarly high, reported by 18% of people on probation compared to 3% of the general population.

Outpatient hospital consultations were attended by 23% of respondents compared to 31% of the general population.

Substance misuse services had been accessed by 27% respondents, with 19% having accessed them three or more times. Prison healthcare was a significant provider of health services for those on probation with just under a third (28%) having used prison healthcare services in the last 12 months.

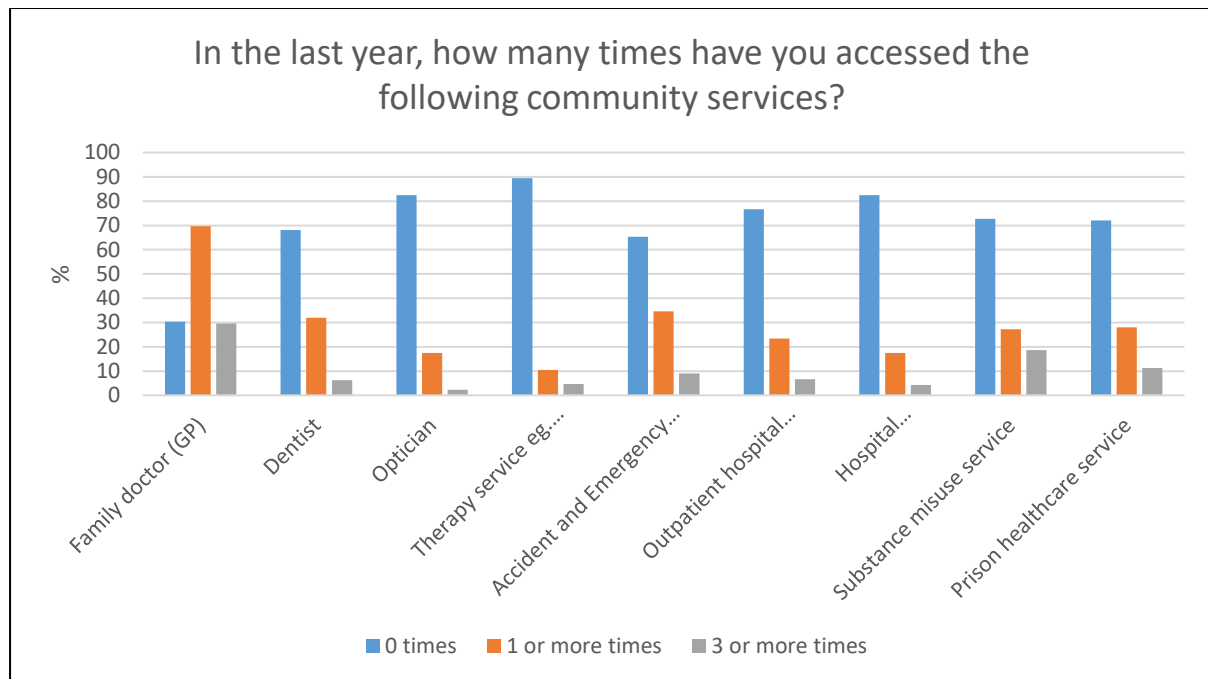


Figure 23: Proportion of respondents attending community health services in the previous year, by frequency

5.5 Discussion

5.5.1 Demographics

The majority of people on probation in this health needs assessment were white (95%), male (93%) and aged 21-49 years (82%). This is in line with the demographics of the total population of people on probation in SNPT PDU (90% white, 89% male, 80% aged 21-49 years) and Wales (88% white, 90% male, 80% aged 21-49 years), suggesting that the sample featured in this questionnaire was representative of the probation population in Wales.

The gender and ethnic demography of the sample in this questionnaire were also similar to that of the other UK-based studies into the health of people on probation, where the samples were also predominantly white males (Brooker *et al*, 2008; Hatfield *et al*, 2004; Mair and May, 1997). The samples in the USA-based studies differed slightly, with lower proportions of white ethnicity and higher proportions of females (Bryson *et al*, 2019; Hawks *et al*, 2020; Olson *et al*, 2021; Owens, 2011). Age demographics were difficult to compare due to differences in classification and some studies excluding certain age groups.

5.5.2 Employment

The employment rate amongst people on probation (31%) was less than half that of the general population in Wales (74%). Even after accounting for those who are in training or education, volunteering, or completing community service, there is still a higher proportion of people on probation who are not involved in any work (paid or unpaid) or training than the unemployment rate in Wales (3.4%). This is despite 94% of people on probation being aged 18-59 years, and therefore of typical working age.

The study by Mair and May (1997) was the only other UK-based study to provide employment rates (21%), which is lower than identified in this questionnaire. The study took place 25 years ago and so may be difficult to compare due to changes in the UK and probation services in this time. There were higher employment rates amongst people on probation in the USA-based studies of 50% (Owens, 2011) and 62% (Olson et al, 2021). This may be due to differences in probation services between the USA and UK.

5.5.3 Accommodation and transport

Disproportionate numbers of people on probation appear to live in the highest areas of deprivation. Respondents were found to be living in a variety of accommodation settings, with the highest proportions living with family or dependents (43%) or alone (39%), and only 11% in shared accommodation. Access to green space in the form of a garden was lower than that of the general population, but still at 70%, whilst access to a green space within walking distance was similar to that of the general population. This shows that despite living in more deprived areas, there is still good access to outdoor green spaces, known to be important for health and wellbeing (Van den Berg et al, 2015).

The majority of respondents reported walking as their primary mode of transport undertaken on a weekly basis, with less than a third reporting driving a car. The access to a car rate is lower than that of the general population, where 88% had access to a car. This may be due to increased levels of deprivation and the associated costs of owning and running a car. A quarter of respondents reported that accessing public transport was difficult, with only half saying it was easy to do so. Lack of access to a car, combined with lack of ease of public transport use, could make it difficult for people on probation to travel and access health and support services that they may need. As a positive, the majority of people that were walking on a weekly basis, and the 10% cycling, demonstrates, active forms of transport that are of benefit to health.

5.5.4 General health

Subjective ratings of general health were lower for people on probation than the general population, with higher proportions of people on probation rating their general health as fair, bad or very bad, and less than half rating it as good or very good. This compares to almost three quarters of the general population rating their general health as good or very good. This demonstrates a clear disparity between the subjective health of people on probation compared to the general population, which is in line with the findings of previous studies (Brooker *et al*, 2008; Mair and May, 1997). However, there was a lower proportion of people on probation reporting a longstanding illness than those in the general population. This may be due to the younger age groups of the people on probation in the sample, with the majority being younger than 50 years of age.

Just over half of people on probation felt that their health would be somewhat better or much better in a years' time compared to currently, with over three quarters indicating that they would like to improve their health. This shows a desire to improve their health and presents an opportunity for engagement with health services.

Prevalence of ADHD, autism and dyslexia were higher amongst people on probation than those estimated in the general population. The prevalence of ADHD amongst people on probation was six times that of the general population, whilst autism prevalence was four times higher, and dyslexia prevalence was 1.5 times higher. Research has found ADHD prevalence in prisoners to be 5-10 times that of the general population (Young *et al*, 2015; Baggio *et al*, 2018), with no significant differences found between adult and youth offenders, which is different to the general population where ADHD typically decreases across the life cycle (Young and Cocallis, 2019). This presents an area for further research to identify to what degree these conditions affect the lives of these individuals, their ability to find employment and engagement, and whether they receive sufficient support for this.

5.5.5 Physical health

Physical health conditions were reported by 39% of people on probation. This is similar to the findings of Hawks *et al* (2020) and Olson *et al* (2021), who found physical health problems amongst 31% and 35% of their samples respectively. Lower rates of physical health issues were found by Hatfield *et al* (2004), who found that 19% of people on probation had one or more physical problems. These findings suggest that physical health conditions are a problem for people on probation and support may be needed to address them. It is not known what impact these conditions have on this population, such as whether they prevent them from working or affect their activities of daily living, which could be an area for further investigation.

5.5.6 Mental health

Mental health featured strongly in the questionnaire responses, with almost half (49%) of the people on probation reporting that they had a formal mental health diagnosis, and over half (57%) having been referred to a mental health service previously. This is higher than the findings of Brooker *et al* (2008) and Hatfield *et al* (2004), who found 27% of people on probation to be in contact with mental health services and 25% to have a formal diagnosis, respectively. It is also a 4.9 times higher prevalence of mental health disorder than found in the general population in Wales of 10%. This is in line with the conclusion of other studies, that there are higher rates of mental health problems amongst people on probation than amongst the general population (Bryson *et al*, 2019; Hatfield *et al*, 2004; Hawks *et al*, 2020; Olson *et al*, 2021).

This presents an unmet need for mental health support amongst this group, with a more detailed investigation required to identify the support needed.

5.5.7 Health behaviours

There was a high prevalence of smoking amongst people on probation, with 52% currently smoking and 24% previously having smoked. This is a higher than the general population in Wales, where only 13% were current smokers, and the findings of Hawks *et al* (2020) where 37% of people on probation smoked, but lower than the findings of Brooker *et al* (2008), where 83% of the sample currently smoked. Over half of the current smokers (56%) reported either wanting or maybe wanting

to stop smoking, with 45% reporting that they had never been offered help to stop smoking. This presents an opportunity for engagement with health services, such as Help Me Quit⁹, to reduce smoking rates and the associated health harms of smoking amongst this group. Interestingly, e-cigarette use was higher amongst the general population, which may be due to the lower rates of smoking where people have switched to what they perceive as a less harmful alternative.

There was a high incidence of drug use reported amongst people on probation, with 60% reporting currently (21%) or previously (39%) using them. This is similar to the findings of Hatfield *et al* (2004) and Hawks *et al* (2020), which both found 35% of people on probation to have current drug misuse problems. Rates may actually be higher, as drug use was self-reported via probation practitioners. Reporter bias may also explain why nobody reported currently using anabolic steroids, despite 15% reporting to previously use them. Despite 60% either using or previously using drugs, only 27% of respondents reported accessing substance misuse services. Further research is needed to identify the reasons for low engagement with substance misuse services, potentially through a behavioural science lens to identify whether it is due to capability, opportunity or motivation.

Less than a third (31%) of people on probation reported eating fruit or vegetables daily, with a quarter (26%) eating them less than once a week and 7% reporting that they never ate them. As a healthy, balanced diet is important for health and wellbeing, the probation cohort may benefit from targeted interventions to improve diet.

Findings demonstrated positive levels of exercise, with the majority (64%) exercising most days or daily. Only 11% reported never exercising. It is unclear from the questionnaire though what forms of exercise were undertaken and for what duration, so further investigation would be helpful to identify whether physical activity recommendations are being met.

5.5.8 COVID-19

Previous studies predated the COVID-19 pandemic therefore little was known about COVID-19 prevalence and outcomes within the probation cohort. The cumulative incidence of COVID-19 amongst people on probation (43%) appeared higher than that of the general population of Wales (27%). This may be due to the increased risk of COVID-19 from living closely with others in prison and shared accommodation after release, living in areas of high deprivation, or low vaccine uptake. There was a higher incidence of COVID-19 among unvaccinated people on probation (53%) than those that were vaccinated (38%). COVID-19 vaccination rates were lower amongst people on probation than the general population, with only 63% having had at least one dose compared to 94% in the general population, and the gap widening further for uptake rates of a second and third dose. There was a discrepancy between people on probation having a first dose of the vaccine and then having a subsequent second or third dose, with less than half of those receiving a first dose going on to receive further doses. This is a higher drop-off than observed in the general population. Further research is needed to identify the reasons for the low COVID-19 vaccination uptake amongst people on probation, particularly as to why those who had a first dose did not go on to have further doses.

5.5.9 Healthcare service access

There were varying rates of access to healthcare services by respondents. Most (93%) reported having a GP, with 70% having seen a GP in the last year, which was 12% higher than the general

⁹ [Help Me Quit | Stop Smoking Services In Wales](#)

population, and not dissimilar to the findings of Brooker *et al* (2008). It is worth noting that rates of GP visits in the general population have dropped significantly since the COVID-19 pandemic. The high frequency of people on probation visiting a GP suggests they are seeking healthcare support, but it is not known what for, or what the outcomes of these visits were.

Less than half of respondents reported being registered with a dentist (48%), with only 32% having seen a dentist in the previous year. This is less than the rate observed by Brooker *et al* (2008) of 55%, and the general population (44%), and it is also worth noting that 98% of the general population pre-pandemic had seen a dentist in the previous year. It is not known whether a similarly higher proportion of people on probation saw a dentist pre-pandemic too, which may partly explain the very low numbers seeing a dentist. Further research is required to identify the reasons for people on probation not seeing a dentist in the last year.

Similar findings were observed regarding visiting an optician in the previous year, with only 18% of people on probation doing so, compared to 33% of the general population, and 26% of the sample in the pilot HNA by Brooker *et al* (2008). Only 10% of the respondents had accessed a therapy service in the last year, which was 5% lower than the general population, and similar to the findings of Brooker *et al* (2008). This appears low considering the high incidence of pain, physical problems and longstanding conditions reported by the group.

Mental health services had been accessed by 44% of people on probation, which is lower than the proportion who have received a formal diagnosis or been referred to a mental health service, suggesting that a number of people on probation with mental health needs have not attended a support service. Similar findings were identified by Brooker *et al* (2008), Bryson *et al* (2019), and Owens (2011), who also found lower proportions of people on probation accessing mental health services than those who had mental health problems. There were also 38% of participants who reported wanting more help than they were currently receiving, or who were not receiving any support but wanted to. Further research is needed to identify why people on probation with mental health needs have not been attending mental health services.

Hospital attendances at accident and emergency departments were reported by around a third of respondents, with 23 individuals accessing them three or more times each. Reasons were for these attendances were beyond the remit of this survey however due to the high costs of A&E visits (estimated at £329 per visit with additional £292 if attending by ambulance¹⁰) this would be an area for future research, particularly for those attending three or more times a year. There may be alternative services that individuals could access or missed opportunities for preventative and primary care to intervene and support these individuals at an earlier stage. This is consistent with Brooker *et al* (2008), who found 39% of people on probation attended an emergency department, and reported an over-use of crisis services, with little input in terms of health promotion and preventative healthcare.

Hospital inpatient stays were higher amongst people on probation (18%) than the general population (3%) in the previous year, again suggesting potentially missed opportunities for earlier intervention and avoidance of admissions. The proportion of respondents having inpatient hospital stays was similar to that found by Brooker *et al* (2008). The reasons for these inpatient stays are unknown though, so it may be that due to other co-morbidities and poor health these individuals require greater levels of care. Lower levels of people on probation accessed outpatient hospital appointments (23%) than the general population (31%) in the last year, which, combined with the

¹⁰ [Key facts and figures about the NHS | The King's Fund \(kingsfund.org.uk\)](https://www.kingsfund.org.uk/insights-and-analysis/key-facts-and-figures-about-the-nhs)

increased inpatient stays, suggests lower uptake of proactive early intervention services and greater use of reactive services at crisis points. Similar to A&E admissions, the cost of overnight hospital stays, particularly those that involve intensivist or surgical care frequently runs into thousands of pounds per admission. People on probation may benefit from education and awareness raising of health support and care services available to them and how to access them, emphasising the benefits of early intervention to avoid crisis management, improving the efficiency of care and reducing costs.

5.6 Key points

1. Demographically, the majority of people on probation were white males aged 21-49 years.
2. People on probation mostly lived in the highest areas of deprivation but had access to gardens and green space on a comparable level to the general population.
3. Employment rates of people on probation (31%) were less than half that of the general population (74%), despite 94% being aged 18-59 years and therefore of typical working age.
4. The most common mode of transport was walking, with limited car driving and only half reporting easy access to public transport.
5. Self-reported general health was lower than the general population, with less than half rating their health as good or very good.
6. Rates of ADHD, autism and dyslexia were higher than in the general population, being six times higher for ADHD, four times higher for autism, and 1.5 times higher for dyslexia.
7. Prevalence of mental health problems was 4.9 times higher amongst people on probation than in the general population, with 38% also wanting more mental health support.
8. Smoking rates were high (52%) compared to the general population (13%). However, 56% wanted, or maybe wanted, to have help to quit.
9. Drug use was high (60% currently using, 39% previously), but only 27% reported having accessed substance misuse services.
10. COVID-19 incidence was higher amongst people on probation (43%) than the general population (27%), with low vaccination uptake (63% first dose), particularly for 2nd (56%) and 3rd (30%) doses.
11. In the last year, people on probation accessed a GP on a comparative level to the general population, but low proportions accessed a dentist (32%), therapy service (10%), optician (18%) or hospital outpatient consultation (23%).
12. Accident and emergency departments were accessed by 35% of people on probation in the last year, with 23 individuals accessing them three or more times each. Inpatient hospital stays were reported by 18% of people on probation, compared to 3% in the general population.

5.7 Strengths and Limitations

The majority of respondents to the questionnaire were white males aged 21-49 years old, which is representative of the population of people on probation in Wales but may not be representative of probation cohorts in other nations.

The questionnaire covered a wide breadth of topics related to health, accommodation and transport, giving many indications for future research into this under-studied population and their health needs. It intentionally did not go into high-level detail on any of the topics, as the aim was highlighting the main areas for future investigation and to act as a starting point for such work.

As with any subjective self-reported survey, a limitation is that report-bias may have affected results, particularly around things such as substance misuse, as responses were provided via probation practitioners.

6. Recommendations

This health needs assessment highlights the very high health needs yet low usage of preventative healthcare services by people on probation. It supports the need for innovative healthcare solutions, further research and investigation to reduce health inequalities and improve health outcomes for this cohort. The following recommendations are made for future service provision and research.

6.1 Recommendations for future service provision:

6.1.1 National recommendations:

1. NHS services in Wales should recognise the high health needs of probation cohorts and consider them within all aspects of health service policy and planning
2. NHS services in Wales should recognise the benefit that partnering with probation services brings by providing a platform to reach a population of the Welsh community that have high health needs but are considered 'hard to reach'
3. NHS services in Wales should foster strategic collaboration with HMPPS in Wales to work together to find solutions to improve the health of those under probation services

6.1.2 Local recommendations:

1. Swansea Bay University Health Board (SBUHB) should consider the feasibility of working directly with the SNPT PDU to access the probation cohort for the delivery of select health services
2. SBUHB should work directly with HMPPS in Wales and the SNPT PDU to develop collaborative solutions focusing particularly on the following health areas where high needs, but low engagement have been identified:
 - a. Mental health
 - b. Substance use
 - c. Learning disabilities/neurodiversity
3. Public health teams and preventative services within SBUHB and Public Health Wales should consider working with the SNPT PDU to deliver the following services:
 - a. Smoking cessation
 - b. Vaccination
 - c. General health promotion to support early intervention and uptake of healthy behaviours

6.2 Recommendations for future research and evaluation

1. Investigation into the disease burden within this cohort to understand what the long-standing illnesses are and causes of pain behind the responses provided
2. Investigation into how those on probation use health services and for what purpose, particularly around reasons for high usage of emergency services. Such investigation should include cost-analysis and make recommendations for reducing high costs to the NHS.
3. Investigation into barriers to healthcare access for those under probation, particularly around preventative services and therapies
4. Evaluation of future collaborative models of health service delivery between NHS and HMPPS, including outcome and impact assessments, to enable wider learning

7. Conclusion

The results of this health needs assessment show that people on probation are likely to have poorer self-reported health than that of the general population, a higher prevalence of unhealthy behaviours, and lower accessing of health services. This subgroup of the population features little in the literature, with much less known about their health needs than the prison population.

Further understanding is needed around the disease burden in this cohort and the impact of their health conditions on wider wellbeing and criminal behaviour. Perhaps most importantly, understanding is needed around the barriers for accessing preventative health services. Improved collaboration between health and justice services is needed to jointly drive improvements. New initiatives should be considered to improve uptake of preventative health services and reduce the burden on accident and emergency departments. Any new interventions or models of health delivery should be evaluated to demonstrate outcomes and impact.

References

- Baggio S, Fructuoso A, Guimaraes M et al (2018) Prevalence of attention deficit hyperactivity disorder in detention settings: a systematic review and meta-analysis. *Front Psychiatry*, 9:331
- Brooker C, Fox C, Barrett P & Syson-Nibbs (2008) A health needs assessment of offenders on probation caseloads in Nottinghamshire and Derbyshire: report of a pilot study. Available from: [\(13\) \(PDF\) A health needs assessment of offenders on probation caseloads in Nottinghamshire and Derbyshire: report of a pilot study \(researchgate.net\)](#) [Accessed 15 October 2022]
- Brooker C, Syson-Nibbs L, Barrett P, Fox C (2009) Community managed offenders' access to healthcare services: Report of a pilot study, *Probation Journal*, 56, 1, 45–59
- Brooker C, Sirdifield C and Marples R (2020) Mental health and probation: a systematic review of the literature, *Forensic Science International: Mind and Law*, 1:100003
- Bryson W, Cotton B, Barry L et al (2029) Mental health treatment among older adults with mental illness on parole or probation, *Health and Justice*, 7, 4
- Harris F, Hek G & Condon L (2006) Health needs of prisoners in England and Wales: the implications for prison healthcare of gender, age and ethnicity, *Health and Social Care in the Community*, 15, 1, 56-66
- Hatfield B, Ryan T, Pickering L et al (2004) The mental health of residents of approved premises in the Greater Manchester probation area: a cohort study, *Probation Journal*, 51, 2, 101-115
- Hawks L, Wang E, Howell B et al (2020) Health status and health care utilization of US adults under probation: 2015-2018, *American Journal of Public Health*, 110, 9, 1411-1417
- Home Office (2004) Reducing Re-offending: National Action Plan. Available from: [5505-HO-Re-Offending 1 \(nicco.org.uk\)](#) [Accessed 2 December 2022]
- Lloyd M (2013) A Health needs assessment of offenders in the community in Cheshire East, Cheshire West & Chester, Warrington and Wirral. Available from: http://info.wirral.nhs.uk/document_uploads/NeedsAssessments/CheshireOffenderHNA_REPORT_June13_Final060613.pdf [Accessed 10 October 2022]
- Mair, G & May, C (1997) Offenders on Probation: A Research and Statistics Department Report. Available from: [\(13\) \(PDF\) Offenders on Probation \(researchgate.net\)](#) [Accessed 4 September 2022]
- National Autistic Society (2022) What is autism? Available from: [What is autism](#) [Accessed 10 September 2022]
- National Health Service (2022). Dyslexia overview. Available at: [Dyslexia - NHS \(www.nhs.uk\)](#) [Accessed 27 September 2022]
- National Institute for Health and Care Excellence (2021) Attention deficit hyperactivity disorder: How common is it? Available from: [Prevalence | Background information | Attention deficit hyperactivity disorder | CKS | NICE](#) [Accessed 27 September 2022]
- National Probation Service (2019) National Probation Service Health and Social Care Strategy 2019-2022. Available from: [NPS Health and Social Care Strategy 2019 Brochure \(publishing.service.gov.uk\)](#) [Accessed 6 December 2022]

Olson M, Shlafer R, Bodurtha P et al (2021) Health profiles and racial disparities among individuals on probation in Hennepin County, Minnesota, 2016: a cross-sectional study, *BMJ Open*, 11:e047930

Owens G, Rogers S & Whitesell A (2011) Use of mental health services and barriers to care for individuals on probation or parole, *Journal of Offender Rehabilitation*, 50, 37-47

Probation Service (2022) About Us. Available from: [About us - Probation Service - GOV.UK \(www.gov.uk\)](https://www.gov.uk/about-us) [Accessed 13 October 2022]

Public Health Wales (2021) Report 1: Cost associated with inequality in hospital service utilisation to the NHS in Wales. Available from: [PowerPoint Presentation \(nhs.wales\)](https://www.nhs.uk/powerpoint-presentations) [Accessed 13 October 2022]

Revolving Doors Agency (2017) Rebalancing Act. A resource for Directors of Public Health, Police and Crime Commissioners, the police service and other health and justice commissioners, service providers and users. Available from: [basw_91153-9_0.pdf](https://www.basw.org.uk/resources/publications/basw_91153-9_0.pdf) [Accessed 6 December 2022]

Skeem, J & Louden, J (2006) Toward evidence-based practice for probationers and parolees mandated to mental health treatment, *Psychiatric Services*, 57, 3, 333-342

Social Exclusion Unit (2002) Reducing Re-Offending by ex- prisoners. Available from: [326 - Reducing re-offending by ex-prisoners.pdf \(nicco.org.uk\)](https://www.nicco.org.uk/resources/326-reducing-re-offending-by-ex-prisoners.pdf) [Accessed 6 December 2022]

Social Exclusion Unit (2004) Social exclusion and mental health. Available from: [5557-ODPM-Mental Health Rep \(artshealthresources.org.uk\)](https://www.artshealthresources.org.uk/5557-ODPM-Mental-Health-Rep) [Accessed 6 December 2022]

Sturup-Toft S, O'Moore E & Plugge E (2018) Looking behind the bars: emerging health issues for people in prison, *British Medical Bulletin*, 125, 1, 15-23

UK Government (2022) COVID-19 dashboard. Available at: [Cases in Wales | Coronavirus in the UK \(data.gov.uk\)](https://data.gov.uk/cases-in-wales-coronavirus-in-the-uk) [Accessed 27 September 2022]

Van den Berg, M, Wendel-Vos W, van Poppel M et al (2015) Health benefits of green spaces in the living environment: A systematic review of epidemiological studies. *Urban Forestry and Urban Greening*, 14, 4, 806-816.

Welsh Government (2021) A Healthier Wales: our plan for health and social care. Available from: [A Healthier Wales \(gov.wales\)](https://www.gov.wales/a-healthier-wales) [Accessed 13 October 2022]

Welsh Government (2022) Labour market overview: January 2022. Available from: [Labour market overview: January 2022 | GOV.WALES](https://www.gov.wales/labour-market-overview-january-2022) [Accessed 6 December 2022]

Young S, Moss D, Sedgwick O et al (2015) A meta-analysis of the prevalence of attention deficit hyperactivity disorder in incarcerated populations, *Psychological Medicine*, 45, 2, 247-58

Young S & Cocallis K (2019) Attention deficit hyperactivity disorder (ADHD) in the prison system, *Current Psychiatry Reports*, 21, 6, 41

Appendix 1: Questionnaire

About you

2. How old are you?

- 18-20 years old
- 21-29 years old
- 30-39 years old
- 40-49 years old
- 50-59 years old
- 60-69 years old
- 70-79 years old
- 80+ years old

3. What is your ethnic background?

White

- British
- Irish
- Other

Asian or Asian British

- Indian
- Pakistani
- Bangladeshi
- Any other Asian background

Mixed

- White and Black Caribbean

- White and black African
- White and Asian
- Any other mixed background

Black or Black British

- Caribbean
- African
- Any other black background

Other Ethnic Group

- Chinese
- Any other Ethnic Group
- I do not wish to disclose my ethnic origin

4. How do you describe your gender?

- Male
- Female
- Non-binary
- Prefer not to say

5. What is your postcode?

- Not sure
- Prefer not to say

Postcode:

6. What type of supervision are you under?

- Post-release
- Community order
- Prefer not to say

7. Have you ever been in prison?

- Never been in prison
- Once
- Twice
- 3+ times
- Prefer not to say

8. Have you been in prison in the last 12 months?

- Yes
- No
- Prefer not to say

9. At the moment are you:

	Yes	No
In training or education	<input type="checkbox"/>	<input type="checkbox"/>
Volunteering	<input type="checkbox"/>	<input type="checkbox"/>
In employment	<input type="checkbox"/>	<input type="checkbox"/>
Completing Community Service	<input type="checkbox"/>	<input type="checkbox"/>

Accommodation

10. Do you live (tick all that apply):

- Alone
- With family or dependents
- With friends
- In shared accommodation
- Prefer not to say

11. Do you share facilities (bathroom/kitchen) with others where you live?

- Yes
- No

12. Do you have access to an outdoor area/garden at home?

- Yes
- No

13. Can you access green space, such as parks, within walking distance from home?

- Yes
- No

Transport

14. Which forms of transport do you use on a weekly basis? (tick all that apply) *

- Walking
- Cycling
- Bus

- Train
- Taxi
- Drive a car
- Driven by another (non-taxi)

15. Is accessing public transport (buses or trains):

- Easy
- Neither easy nor difficult
- Difficult

Your health

16. How would you rate your general health?

- Very good
- Good
- Fair
- Bad
- Very bad

17. Compared to a year ago, how would you rate your general health now?

- Much better
- Somewhat better
- About the same
- Somewhat worse
- Much worse

18. In a year's time, do you think your health will be:

- Much better
- Somewhat better
- About the same
- Somewhat worse
- Much worse

19. Do you have any long-standing illnesses?

- Yes - 1
- Yes - more than 1
- No

20. Would you like to improve your health?

- Yes
- No
- Not sure

21. How much bodily pain have you had in the last 2 weeks?

- None
- Minimal
- Moderate
- Severe

22. Do you have a formal diagnosis of any of the following conditions? (tick all that apply)

- ADHD
- Autism
- Dyslexia
- Prefer not to say
- No

23. Have you ever been referred to a mental health service?

- Yes, I have attended
- Yes - I'm waiting for an appointment
- Yes - but I didn't attend
- No
- Not sure
- Prefer not to say

24. Do you have a mental health condition which has been diagnosed by a doctor or other health professional?

- Yes, I've been diagnosed with a mental health condition
- No, but I think I do have a mental health condition
- No, I have no mental health conditions
- Prefer not to say

25. Do you access support for your mental health?

- Yes, and it meets my needs
- Yes, but I'd like more help

- No, I choose not to
- No, I do not need any
- No, I'm unable to but would like to
- Prefer not to say

26. Do you have a physical health condition which has been diagnosed by a doctor or other health professional?

- Yes
- No
- Prefer not to say

27. Do you access support for your physical health?

- Yes, and it meets my needs
- Yes, but I'd like more help
- No, I do not need any
- No, I choose not to
- No, I'm unable but would like to
- Prefer not to say

28. Have you ever used any of the following? (please select one option per row)

	Yes - Currently	Yes - Previously	No	Prefer not to say
Smoke cigarettes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vape	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
E-cigarettes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Alcohol	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Drugs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Anabolic steroids	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

29. If you are a current smoker, do you want to stop smoking?

- Yes
- No
- Maybe
- I don't smoke

30. If you are a current smoker, have you been offered advice or help to stop smoking?

- Yes, and took this up
- Yes, but did not take this up
- No
- I don't smoke

31. How often do you eat fruit or vegetables?

- Every day

- Most days
- Less than once a week
- Never

32. How often do you exercise?

- Every day
- Most days
- Less than once a week
- Never

COVID-19

33. Have you had symptoms of COVID-19 (persistent cough, loss of taste/smell, fever) since January 2020?

- Yes
- No
- Not sure
- Prefer not to say

34. Have you ever been tested for COVID-19?

- Yes
- No
- Prefer not to say

35. Have you ever tested positive for COVID-19?

- Yes
- No
- Prefer not to say

36. Have you received any COVID-19 vaccinations?

- Yes, 1 dose
- Yes, 2 doses
- Yes, 3 doses
- No, but I'd like to have one
- No, I do not wish to have one
- Prefer not to say

37. Where did you receive your COVID-19 vaccination?

- Prison
- Mass Vaccination Centre

Health services

38. Do you have a GP?

- Yes
- No

39. Do you have a dentist?

- Yes
- No

40. In the last year, how many times have you accessed the following community services? (tick one box on each row)

	0 times	1-2 times	3+ times
Family doctor (GP)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Community nurse eg. practice or district nurse	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	0 times	1-2 times	3+ times
Dentist	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Optician	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mental Health Services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Therapy service eg. Physiotherapist, Occupational Therapist, Speech Therapist	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Accident and Emergency department/out of hours service	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Outpatient hospital consultation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hospital inpatient/overnight stay	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Substance misuse service	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Prison healthcare service	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



GIG
CYMRU
NHS
WALES

Iechyd Cyhoeddus
Cymru
Public Health
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