Queensland Women Prisoners’ Health Survey
Recommended citation:

FOREWORD

The 2002 female prisoner health survey is the first formal survey of the health status of Queensland prisoners ever undertaken. As such, this is a significant achievement and one that will influence the planning and delivery of health services to female prisoners in the future.

The survey is an initiative of the Department of Corrective Services in partnership with the School of Population Health, University of Queensland. The success of this project demonstrates that such partnerships can deliver very successful outcomes with regard to public sector services.

I would like to extend my thanks to the Departmental and University staff who were integral to the running of the survey. Particular thanks is given to Barb Hockings, Peter O’Rourke, Megan Young and Tony Falconer, the four surveyors Jean Cowling, Fleur Ward, Debbie Kelly and Andrea Howie, the general managers and staff of Townsville, Brisbane Women’s and Numinbah correctional centres and the health services staff of those centres, particularly the health services coordinators. The relatively smooth running of the survey in an environment as complex as correctional centres is a credit to all the staff involved.

The recommendations of the survey include conducting further prisoner health surveys in the future, including a similar survey for male prisoners and contributing to national data collection. These are challenges that the Department is keen to embrace.

Finally, through facilitating improvement in prisoner health, the survey contributes to the State Government goal of safer and more secure communities.

HELEN RINGROSE
Director General
Queensland Department of Corrective Services
EXECUTIVE SUMMARY

The Queensland Women Prisoners’ Health Survey was conducted in all custodial Correctional Centres for women in Queensland. This survey was based on a similar but more in-depth survey conducted for male and female prisoners in New South Wales initially in 1996, and again in 2001. The health and health-related issues for female prisoners in Queensland have not been previously documented and the findings from this survey will provide information and insight into the state of health and issues of concern to women in prison. They will inform and guide decisions and policy pertaining to health services, funding and priorities, particularly within the Women’s Services Unit and the Health and Medical Services Unit of the Department of Corrective Services.

Objectives

- To provide a description of the physical and mental health status of women prisoners in Queensland correctional facilities.
- To facilitate strategic input into the planning of the clinical services for the Health and Medical Services.
- To develop indicators allowing for comparisons between the health status of the general population and prison inmates.
- To provide information for comparison with New South Wales and to contribute to a national information system on prisoners’ health.
- To examine specific hypotheses relating to prisoners’ health arising from the findings of the New South Wales study, and from the strategic priorities of the Women’s Policy Unit within the Queensland Department of Corrective Services.

There are three custodial prisons for women in Queensland. Brisbane Women’s Correctional Centre is the largest prison where prisoners live in either community style residential units or secure custody. Numinbah Correctional Centre is based in the Gold Coast Hinterland and has a Female Unit with a low security open setting. Townsville Women’s Correctional Centre has a secure unit and an open custody complex. Women in all three of these Correctional Centres were included in this survey.

The survey is underpinned by a broad definition of health that incorporates mental and physical health, health-related behaviours and prevention in a holistic approach. Information was recorded regarding chronic illness, communicable diseases, mental health, dental health, childhood experiences and lifestyle factors. Participants voluntarily completed a questionnaire by one-on-one interview, a brief physical assessment and supplied a blood sample. Additional information was also obtained from medical records and the Corrective Services Information System.

With the exception of women who were made unavailable due to clinical observation or potential safety risk to interview staff, all female prisoners in Queensland during the period of data collection from 6 March to 5 April 2002 were included in the sampling frame. The participation rate for all women approached to participate in the survey was 77.1%. Data analysis revealed that this sample was representative of the general population of female prisoners, and
that all findings from the 212 participants could be generalised to the population of women in Queensland prisons.

- Demographically, female prisoners feature a relatively young age profile, a high proportion of Indigenous Australians, low levels of education and, prior to imprisonment, low rates of employment and a high proportion of individuals receiving social security benefits.

- 57.1% of women reported having been diagnosed with a specific mental illness, the most common being depression (38.7% of the sample). 68.9% of women had Beck Depression Inventory scores consistent with mild to severe depression.

- Current smokers represent 82.9% of the female prison population.

- Alcohol consumption at hazardous or harmful levels prior to incarceration was reported by 37.9% of the sample. The prevalence of harmful drinking amongst Indigenous women incarcerated in northern Queensland was extremely high at 71.4%. This proportion was well in excess of that for Indigenous women in southern prisons (33.3%) and non-Indigenous women in both northern and southern prisons (11.5% and 13.5%, respectively).

- Over half the sample reported a history of injecting drug use. The majority (79.7%) reported having used illicit drugs at some time and 62.7% used an illicit drug regularly in the 12 months before imprisonment. Cannabis was the most commonly used drug, used by 35.8% regularly in the 12 months prior to imprisonment, however, similar rates of regular use were reported for amphetamines (35.4%) and opiates (32.5%). One quarter of the sample reported having used an illicit drug in prison.

- 45.0% of participants tested antibody positive for hepatitis C, and 92.3% of those with a positive test reported a history of drug injection.

- Women in prison have a history of unplanned pregnancies, with 45.3% reporting not having planned any of their pregnancies, and 63.7% having at least one unplanned pregnancy.

- 42.5% of women reported being the victim of non-consensual sexual activity before the age of 16, and 37.7% of the sample reported having been abused physically or emotionally before the age of 16. Of women reporting childhood sexual abuse, 73.3% experienced actual or attempted intercourse on one or more occasions before the age of 16, and 36.5% experienced this actual or attempted intercourse before the age of 10 years old.

- 42.1% reported having a tooth extraction, and 9.6% reported having a filling during their last dental visit. The rate of extraction is much higher
than population rates, while the rate of fillings is much lower than population rates.

- The overall rates for numerous behaviours related to poor health are high amongst this sample. For example these women maintain poor nutrition, low levels of exercise, high prevalence of being overweight or obese, high rates of smoking and alcohol consumption, and low levels of sun protection.

- Women in prison demonstrate high levels of various risk taking behaviours, for example drug use and needle sharing, smoking and alcohol consumption, regular gambling, unprotected sex and unplanned pregnancies.

It is important to consider the short duration of imprisonment and high rates of repeat offences for the majority of women incarcerated in Queensland. The health status of these women is not merely a reflection of the health care they receive in prison, but is a continuing manifestation of their on-going health status both within the community and in prison.

**RECOMMENDATIONS**

This survey provides an example of demonstrated mutual benefits achieved through a successful partnership between the Queensland Department of Corrective Services and the University of Queensland's School of Population Health to enhance the quality of health services and health outcomes for prisoners in Queensland.

- This survey should be used as a model for future cooperative initiatives in research and policy formulation.

Women in prisons are a high need group for health services relative to women in the community.

- There is a need for general health services to match community standards, and the need for additional services pertaining to issues more prevalent amongst female prisoners. Overall, the prison population requires over-servicing in terms of community norms for health services.

The three big issues pertaining to the health of women in prisons are levels of drug abuse, mental health and childhood sexual abuse.

- Large gains could be made for this population by implementing programs and policies associated with these three important areas. This will optimise results in gaining significant benefit and cost effectiveness through targeting these areas of need.

People in prison represent a reservoir of disadvantaged and ‘hard to find’ health consumers. While incarcerated, these individuals are more easily accessible and this provides a unique opportunity to monitor and treat health-related issues.

- The opportunity should be taken to access normally hard to find people when they are present in the prison population.
• Intensified health surveillance and screening activities should be conducted for the prison population (infectious diseases, sexually transmitted infections, Pap screens, blood pressure, diabetes, skin checks).
• Specific health promotion interventions should be conducted within prisons (diet, exercise, sun safety, dental health).
• Specific interventions for addictions should be conducted within prisons (smoking, alcohol, illicit drugs, gambling).

There have been calls for the establishment of a national agenda surrounding the health of prisoners in Australia.
• Queensland needs to be actively involved in the establishment and implementation of a national prisoner health survey in Australia.
• Contribution should be made towards the national agenda for a minimum dataset for ongoing surveillance of the health of prisoners in Australia.

There is a need for more work in conducting health research in the Corrections context.
• A budget allocation should be established for the implementation of a survey of male prisoners in Queensland within the next two years.
• A follow up survey of female prisoners should be conducted in Queensland in five years time.
• Detailed analysis of the current data should be published in peer-reviewed scientific papers.
• Research into specific health priority areas should be conducted within the Queensland prison population.
• Comparative research should be funded to analyse and report on the pooled data from the New South Wales and Queensland surveys.
ACKNOWLEDGEMENTS

The authors wish to acknowledge the following individuals and organisations for assistance with development of materials, implementation, data analysis and feedback on the processes in preparing this document.

Tony Butler and Michael Levy from New South Wales Corrections Health Services developed the data collection instruments that formed the basis of instruments used in the Queensland survey, in addition to providing guidance and insight in planning and logistics, and establishing a cooperative venture in which data can be shared for direct comparisons.

The Interview Staff: Jean Cowling, Fleur Ward, Debbie Kelly and Andrea Howie conducted interviews, physical assessments and review of medical records through implementation of the data collection process.

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Academic staff within the School of Population Health at the University of Queensland provided ongoing feedback regarding development of instruments and preparation of this document.
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INTRODUCTION

The Queensland Women Prisoners’ Health Survey was developed on the basis of the Inmate Health Survey conducted in New South Wales in 1996 and 2001. A partnership was formed between the Department of Corrective Services (DCS) and the University of Queensland’s School of Population Health to conduct the survey. The Queensland study focussed specifically on women in order to establish a strong representative sample from the population of females incarcerated in Queensland prisons. Staff from the university acted in advisory and project management roles with staff from the DCS fulfilling the operational roles in data collection.

Aims and Objectives

- To provide a description of the physical and mental health status of women prisoners in Queensland correctional facilities.
- To provide strategic input into the planning of the clinical services for the Health and Medical Services.
- To develop indicators allowing for comparisons between the health status of the general population and prison inmates.
- To provide information for comparison with New South Wales and to contribute to a national information system on prisoners’ health.
- To examine specific hypotheses relating to prisoners’ health arising from the findings of the New South Wales study, and from the strategic priorities of the Women’s Policy Unit within the Queensland Department of Corrective Services.

STUDY SAMPLE

Queensland has four Correctional centres for women, however these essentially represent two major centres that also correspond with the only two points of reception into the prison system for offenders. Brisbane Women’s Correctional Centre (BWCC) and the women’s unit at Numinbah Correctional Centre are both located in south-east Queensland, while Townsville Women’s Correctional Centre (TWCC) and its open custody farm are both in Townsville, in the north of the state. BWCC and the secure unit of TWCC are the admission centres. BWCC is the largest centre, with an average 215 women. The two units at TWCC have a combined average of 76 women, and Numinbah has an average of 29 women. Open custody is maintained at Numinbah and the low security farm in Townsville. BWCC accommodates prisoners in open residential units where occupants have relative freedom of movement within the centre, and in secure cell blocks with a range of security levels. The secure unit of TWCC allows freedom of movement within the centre throughout the day, with secure cells during the night.

This study focussed on the population of women incarcerated in Queensland prisons during the period from 26th of February to the 26th of March, 2002. Both sentenced and remand prisoners were included in the health survey, and there were 347 women who were incarcerated during that period. Various factors rendered a large number of women unavailable for participation in the study. Due to safety issues nine women were excluded from the study on the advice of
custodial staff, and a further four women were unable to participate in the study because they were under observation for psychiatric instability for the duration of data collection. Thirty-nine women were discharged from prison before an interview was conducted, and five women were transferred to another correctional centre. Eleven women were not approached to participate in the study due to time restrictions at the end of the data collection period and four women were unable to participate in the study due to language barriers. Hence 275 out of the population of 347 were available to participate in the study, 63 women declined to participate, leaving 212 participants. The participation rate was calculated using the total number of eligible women approached to participate in the study as the denominator. The resulting participation rate was 77.1%.

As a sub-group from within the female prison population in Queensland, the study sample was representative of the overall group. Statistical analysis revealed only minor differences between the population and the study sample, that is, those women who actually participated in the survey. Indigenous women are slightly under-represented in the sample with 25% compared to 29.1% in the prison population. The employment profile of the sample differed slightly to that of the prison population, with participants more likely to have been employed or undertaking home duties prior to their incarceration. Women who had served more than three months in their current sentence were more likely to have participated in the study, mainly due to logistical issues associated with short sentences and remand inmates being discharged from prison before they could be interviewed. These differences are minor and do not indicate any problems associated with generalising the findings from this survey to the overall population of female prisoners in Queensland in 2002.

**METHODOLOGY**

Data collection tools were developed from the documents used in the New South Wales survey, though on a smaller scale. The questionnaire incorporated questions across the broad spectrum of health and was implemented through a one-on-one interview. A simple physical assessment was conducted, a blood sample taken and review of medical records undertaken for all participants unless otherwise refused or unavailable. The Department of Corrective Services Research Committee granted permission to conduct the research project.

Four interviewers were recruited from within the Department of Corrective Services (DCS) to conduct interviews, physical assessments and chart reviews. All interviewers were female and experienced in the correctional environment. Three of the interviewers were nurses employed in Queensland prisons and the fourth interviewer had a background in social work and was employed in head office in the Women’s Policy Unit. Physical assessments were only carried out by the three nurses who were trained to do so. All interview staff attended a two-day training workshop to ensure standardised implementation of data collection tools and to establish procedural guidelines.

Participation in the study was voluntary and subsequent to informed consent. All participants had the right to refuse any aspect of the questionnaire or physical
assessment. As an incentive and remuneration for their time, all participants received a credit of $5.00 to their trust account.

Data collection took place in prisons from the 4th of March to the 5th of April, 2002. The target was to interview all women willing to participate in the study within a four-week period. A major concern was gaining a representative sample. However, scheduling and prediction of progress were unreliable due to the prison context. Interview duration was expected to vary dramatically depending on the individual participant, while inevitable and unpredictable delays encountered in prisons were part of the research process in this environment. At all centres, women who were identified as being close to release date were prioritised for interview to minimise the number released before being approached to participate in the study. These women were either close to completing their sentence or were on remand and could potentially be discharged at any time depending on court appearances and rulings.

Survey interviewers sought comment and were guided by custodial staff regarding the suitability of prisoners for inclusion in the study. Any women considered to be a potential threat to themselves or interview staff were excluded from the study.

The Questionnaire
Interview duration ranged from 50 minutes to approximately 2 hours. Participants were asked questions relating to their general health, specific conditions, lifestyle issues such as exercise and diet, health related behaviours, drug use, mental health, sexual and reproductive health, sexual and physical abuse. Also included were three standardised tools: the World Health Organisation’s Alcohol Use Disorders Identification Test - AUDIT (Saunders et al., 1993); the SF-36 for general physical and psychosocial health; and the Beck Depression Inventory (Beck et al., 1961). Interview staff made referrals to the health centre or psychologist regarding a variety of health matters only when requested by the interviewee or when judged as an issue of patient safety.

Physical Assessment
Measures were taken for weight, blood pressure and peak expiratory flow and a blood sample was taken from those who consented. Blood samples were not obtained from a number of women due to poor venous access. Medical records were reviewed for results of the following tests: hepatitis B and C serology, HIV serology, syphilis serology, cervical screening, gonorrhoea screening, and chlamydia screening. Current medications were also noted. Pathology testing was conducted on all blood samples for hepatitis C, blood glucose and total cholesterol. For hepatitis C, screening was conducted for specific antibodies, with a repeat test conducted to confirm positive cases. This testing process identified women who had been exposed to the hepatitis C virus, however because 25% of patients clear the virus (Department of Health and Aged Care, 2001), it is likely that some of the women who tested positive to hepatitis C antibodies have cleared the actual virus or will do so in the future.

Data that was not obtained through the physical assessment for various reasons was sought through the medical records and the state’s pathology database.
Some testing of stored serum was conducted to maximise the number of hepatitis C results obtained.

**Additional Data Sources**
In addition to information obtained through interview and physical assessments, two DCS databases were used to source information. The Health and Medical Services (HAMS) database and the Correctional Information System (CIS) database were used to obtain information regarding health issues, physical measurement (height) and demographic information.

**Data Analysis**
All data was de-identified and stored securely to maintain confidentiality. Data was entered manually and was subjected to thorough data cleaning methods. Data analysis was conducted using the Statistical Package for the Social Sciences (SPSS) software. The simple statistical techniques of frequencies and crosstabulations were used in formulating this report.

The presentation of results has generally been made using frequencies or percentages of the total sample, however percentages are sometimes presented as proportion of a sub-group within the sample, for example injecting drug users. Comparisons made with the New South Wales data are always with reference to the female sample within the New South Wales survey. Population based comparative data has been drawn from various sources in order to enhance understanding and provide a context in which to interpret findings.
DEMOGRAPHICS

Females held in adult prisons in Queensland are young relative to females in the general adult population, with a minimum of 17 years, a maximum of 58 years, and a median age of 30.5 years old. The minimum age for imprisonment in an adult prison varies across states in Australia, with Queensland being one of 4 states or territories including 17 year-old offenders in the adult prison population. Figure 1 demonstrates that the age distribution for this survey is similar to that for New South Wales, however there were more women in the younger age group and fewer aged from 25 to 39 years old for the Queensland survey. A consideration is the minimum age of incarceration in adult prisons in New South at 18, compared with 17 in Queensland.

![Age distribution of the study sample in comparison with that for the women in the New South Wales survey](image1)

Figure 1: Age distribution of the study sample in comparison with that for the women in the New South Wales survey

A high proportion of Aboriginal and Torres Strait Islander women are in Queensland prisons, with 29.1% of the women’s prison population and 25% of the study sample identifying as Indigenous. This is much higher than the 3.5% of Indigenous people in the estimated resident population for Queensland (Australian Bureau of Statistics, 2002a).

![Proportion of Indigenous women overall and in the prisons of the two regions of Queensland.](image2)

Figure 2: Proportion of Indigenous women overall and in the prisons of the two regions of Queensland.
Indigenous women in prisons, like the Indigenous community in Queensland, tend to be concentrated in the northern areas of the state. The proportion of Indigenous women in the prisons of south-east Queensland is 15.3%, whereas Indigenous women represent 52.3% of those women in prison in northern Queensland (see Figure 2).

The majority of prisoners (54.2%) were born in Queensland, with 31.6% born in other Australian states and 14.2% born in a country other than Australia. The most common overseas birthplaces were New Zealand, England and Vietnam. Before coming to prison, 36.3% of these women were living in a capital city (generally Brisbane). Various provincial cities were home to 36.8% before prison, and 26.9% were living in other rural areas. This is high relative to the general population of which 18.1% live in rural areas (Australian Bureau of Statistics, 1996). Only five of these women lived outside of Queensland before coming to prison. 74% of the participants in this study were located in southeast Queensland in either BWCC or Numinbah women’s unit, while the remaining 26% were in Townsville.

Sentenced prisoners represented 77.4% of the sample, with the remaining 22.6% in prison on remand. In contrast, remand prisoners represented 1.6% of the female sample for the New South Wales survey. A simple overview of the most serious crime committed (or alleged for remand prisoners) by the participants in this survey is presented in figure 3. Similar offence patterns occurred for women in the New South Wales survey. It should be noted that these crime classifications were selected on the basis of homogeneity, however it is likely that crime undertaken in order to finance drug addiction is not always classified under drug offences and may appear in any other crime classification group.

![Figure 3: Frequency of most serious offence type.](image)

The amount of time served in the current sentence is presented in figure 4. The high proportion of women having served less than six months of their current sentence reflects the crime profiles for female offenders that are associated with short sentences. These results are very similar to that of the New South Wales sample, however there was a slightly higher proportion of women having served
3 months or less in Queensland, and fewer women having served one year or more. This difference is most likely a reflection of the much higher proportion of remand prisoners in the Queensland sample.

Figure 4: Amount of time served in the current sentence.

Re-offenders who had been in prison before represented 53.3% of the group, with 19.8% having served two sentences, 12.7% served three sentences, 8% served 4 sentences, and 12.7% having been imprisoned five or more times. The remainder (46.7%) had been to prison only for the current sentence or remand event. Self-reported total time in prison across all sentences and remand events is presented in figure 5 and indicates that the majority of women have only spent a relatively short amount of time in prison. This is supported by the high proportion serving their first sentence, and again reflects the relatively short sentences for women.

Figure 5: Total amount of time spent in prison across all sentences.
A high proportion of the women in this study (37.3%) finished their education before receiving compulsory schooling to the level of year ten (junior certificate). Figure 6 presents the highest level of education attained by individuals for both the Queensland and New South Wales samples. Women participating in the New South Wales survey were generally less educated than their Queensland counterparts, with 47% finishing school before year ten, however the proportion of women having attained post-secondary education is slightly higher in New South Wales than Queensland (16.5% vs. 13.2%). Female prisoners had very low education levels compared with national figures whereby 40.5% of Australians aged 20-24 years had attained post-school qualifications, 39.8% had completed the highest level of schooling, and only 19.5% did not attain the highest level of schooling (Australian Bureau of Statistics, 2000).

![Figure 6: Highest level of education for participants in Queensland and New South Wales.](image)

The majority of Queensland women (53.6%) finished their schooling aged fifteen or sixteen years old, while 23.2% were aged between twelve and fourteen, and 23.2% were aged seventeen or older upon attainment of their highest level of education. A supplementary indicator of the continuity of education is the number of schools attended. 35.7% attended only two schools and so had little disruption to their education, 42.4% had minor disruptions to their education attending three to five schools, and 21.9% attended six or more schools throughout their years of education.

It is perhaps a reflection of the young age of this group that 40.6% of the sample was single. Only 9.9% had a regular partner and 29.7% were either married or in a de facto relationship at the time of imprisonment. The remaining 19.8% were separated, divorced or widowed. Disruption to the family unit occurs when a parent is incarcerated. 39.8% of women had no children under the age of sixteen, 28.9% had one, 14.2% had two, and 17.1% had three or more children under the age of sixteen in their care prior to imprisonment.

Over half of the study participants were unemployed before their current incarceration (50.5%), compared with 7.8% unemployment for Queensland women overall (Australian Bureau of Statistics, 2002b). A further 18.4% were pensioners and 10.8% undertook home duties. Hence only 20.3% were employed prior to incarceration, a figure close to that for New South Wales with
22% of women employed prior to incarceration. This level of employment is extremely low compared with the general population where 57.1% of Queensland women participate in the state’s labour force (Australian Bureau of Statistics, 2002b).

Only 22.6% of the sample reported usual occupations that were classified as skilled work, with 59.9% in semi-skilled or unskilled occupations, and 17.5% not in the paid workforce. Over 70% were receiving a benefit in the six months before going to prison, regardless of whether they were working or not. This is an indication that this group of people have a high proportion of disadvantage and are in need of a great deal of social support in terms of services and income demands. This notion of disadvantage is further evidenced by the high proportion who had been placed in care as a child (24.1%) or detained in a juvenile detention centre (17.5%). Participants in the New South Wales survey were much less likely to have been placed in care (9.1%), and were slightly more likely to have been incarcerated in juvenile detention (24.2%).

**GENERAL HEALTH STATUS**

The 212 female prisoners were asked to indicate if they suffered from a range of illnesses and conditions relating to their general health. Figure 7 presents the prevalence of the most common conditions. These commonly reported conditions were also the most frequently reported conditions for the New South Wales survey, with comparable prevalence for most conditions. Other conditions that were less frequently reported included: arthritis (11.4%); haemorrhoids (9.0%); hypertension or high blood pressure (17.5%); chest pain and angina (13.7%); heart murmur (9.4%); and palpitations and high heart rate (13.3%). It should be noted that while thirty-seven women had been diagnosed with hypertension, thirteen of these cases were temporary in association with pregnancy.

![Prevalence of self-reported conditions](image-url)

**Figure 7: Prevalence of the most common self-reported conditions.**

Conditions that were self-reported in fewer than twenty women in this group included: epilepsy and seizures; diabetes; cancers and tumours; high cholesterol; heart conditions not previously mentioned; gall stones; peptic ulcers; hepatitis A; hepatitis B and human immunodeficiency virus (HIV). Of the eighteen women reporting cancer or a tumour, the most common types were cervical cancer (n=7) and basal cell carcinoma (n=5). Other cancers specified were breast cancer and cancer of the thyroid gland.
New South Wales featured a higher self-reported prevalence of hepatitis C (46.2%), arthritis (20.5%) and haemorrhoids (15.9%). The older age profile of the New South Wales sample is of relevance for arthritis and haemorrhoids, and the increased prevalence of hepatitis C probably reflects the high prevalence of injecting drug use in the New South Wales sample (64% compared to 55.7% in Queensland).

Blood pathology results for hepatitis C were obtained for 161 participants in the study. Historical results were used to obtain a further 16 results and analysis of stored serum yielded a further 15 results. Of the twenty remaining participants for whom there was no hepatitis C result, ten women reported positive hepatitis C status. Because every other self-reported case was verified through pathology, those ten women were taken to be hepatitis C positive, leaving only ten of 212 participants with no result for hepatitis C. The prevalence of hepatitis C antibody positive results was 45.0%, compared to purely self-reported results of 29.7%. It is important to note that these results pertain to hepatitis antibodies and that a proportion of these women did not carry the hepatitis C virus. Under-reporting of hepatitis C also occurred in the New South Wales survey, whereby 46.2% reported having hepatitis C and blood screening revealed a positive antibody prevalence of 66%. Further testing for the New South Wales sample was conducted, with an overall viraemic prevalence of 51.5% of the sample. As discussed previously, the lower prevalence of hepatitis C in Queensland prisons can be explained due to a lower proportion of injecting drug users. A positive hepatitis C antibody result was coupled with a reported history of drug injection for 92.3% and 86% of the Queensland and New South Wales samples, respectively. The Queensland sample demonstrated a very strong association between both self-reported and pathology-based hepatitis C diagnosis and ever having injected drugs and ever having shared a needle.

Non-fasting blood cholesterol was available for 166 women. As defined in the Ausdiab study (Dunstan et al., 2001) blood cholesterol levels of 5.5mmol/L or lower fall within the recommended range. Normal blood cholesterol levels were obtained for 129 women (77.6%), and 37 women had a cholesterol level of greater than 5.5mmol/L (22.4%). This prevalence for elevated total cholesterol was lower than the national prevalence for women of similar age, where 31.2% of women 25-34 and 39.0% of women 35-44 had blood cholesterol levels higher than 5.5mmol/L. Nine women in the sample reported having been diagnosed with high cholesterol. Only four of these women had normal blood cholesterol pathology. The remaining five had poorly controlled blood cholesterol with levels greater than 5.5mmol/L.

None of the women with a self-reported diagnosis of elevated cholesterol were taking medication for this according to medical chart review. Further, none of the women with laboratory measured elevated blood cholesterol were taking cholesterol-lowering medication. Five women whose cholesterol was normal when measured in conjunction with the study had been prescribed cholesterol-lowering medication.
Seventeen women in the sample (8.2%) had high blood pressure with either a systolic pressure of 140 mmHg or higher, or a diastolic pressure of 90 mmHg or higher. The Ausdiab study (Dunstan et al., 2001) reported a lower national prevalence of hypertension for women of similar age groups, with 3.9% and 7.7% of women aged 25-34 and 35-44 respectively having hypertension. Twenty-four women in the sample reported having been diagnosed with hypertension, and six of these women had a high blood pressure reading. An additional thirteen women reported having had only gestational hypertension, however four of these women had a high blood pressure reading. The remaining seven women who had a high blood pressure reading did not report any prior diagnosis of hypertension and may be undiagnosed cases. A similar prevalence of high blood pressure (7%) was found for the New South Wales survey, where a diastolic blood pressure of 90 mmHg or higher was used as the sole indicator for this condition.

Six percent of women were taking antihypertensive medication according to medical chart review. This included three women who had blood pressure measurements in excess of normal at the time of the study. The remaining 14 women classified as having high blood pressure according to the above criteria were not taking antihypertensives.

Women experiencing chest or angina pain were more likely to have been diagnosed with hypertension and with high cholesterol, however, there was no association between chest pain or angina and either measured high blood pressure or high blood cholesterol.

All of the common conditions were analysed for associations with demographic variables. Associations and important trends are discussed in the subsequent paragraph. The prevalence of asthma decreased as age increased, however this trend was not significant. Prevalence of poor eyesight logically increased as age increased, was more frequent for women who were sentenced, and was less frequent for repeat offenders and those who were unemployed prior to imprisonment. Hepatitis C is commonly transmitted through needle sharing and is more prevalent amongst women imprisoned for drug and property-related crimes than for other offences. Hepatitis C was more common for repeat offenders and those who had spent a total of more than one year in prison, and was less common for Indigenous women than for non-Indigenous women. Age was associated with numerous conditions. The prevalence of arthritis, haemorrhoids, hypertension, angina and heart murmur increased with age. Blood cholesterol was associated with education, such that the proportion of abnormal cholesterol levels increased as education increased. Hence, those with low levels of education had the most favourable cholesterol levels. Repeat offenders similarly had more favourable cholesterol levels than first-time offenders.
SF-36 - General health and well-being

Participants were asked to rate their current health status as either excellent, very good, good, fair or poor. 13.7% rated their health as excellent; 26.9% very good; 35.4% good; 17.0% fair and 7.1% rated their health as poor. These findings are slightly lower than but comparable to those obtained for women (excellent 17.4%; very good 37.3%; good 30.7%; fair 11.5% and poor 3.1%) in the general community (Australian Bureau of Statistics, 1995). Participants also rated their current health compared to their health one year ago. Over a third reported that it was ‘about the same’ (34.4%), while 31.1% felt that their health was much better now, and 17.0% that it was somewhat better now. 13.2% said that their health was somewhat worse now, and 4.2% felt that it was much worse now. These findings contrast with those from the National Health Survey for women aged 18-44 years (much better now 10.6%; somewhat better now 15.3%; about the same 65.1%; somewhat worse now 8.3% and much worse now 0.8%).

The SF-36 is a measure of health status based on well being and functioning in physical and mental health contexts. The SF-36 is a standardised instrument that has been validated across numerous settings to enable comparisons between populations. Figure 8 compares the mean scores for each dimension of the SF-36 for the current sample of women in prison and the sample of women aged 18-44 who participated in the National Health Survey.

As is demonstrated in figure 8, women in Queensland prisons scored below their community counterparts in Australia for all dimensions in the SF-36, particularly with regard to pain and social functioning. With the exception of the physical functioning score, all scores for the prison sample were significantly different from the population norms (p<0.01) using t tests for probability (Australian Bureau of Statistics, 1995). This indicates that women in prison are characterised by lower levels of general and functional health, especially for issues related to mental health. The National Health Survey reported that lower scores for SF-36 dimensions were associated with unemployment, smoking, being overweight or obese, and overall socio-economic disadvantage, all of which are prevalent in women prisoners.
Long-term illness and disability
Participants were asked about long-term illnesses and disabilities, that is, conditions that had troubled them for six months or more. 44% of women reported at least one condition fitting this description, with 11% reporting two or more.

36.3% (n=77) of participants (over 80% of those with long-term conditions) stated that one or more of the conditions limited them either physically or emotionally. 16% of women had suffered an injury or illness that had limited their activities in the two weeks prior to the survey.

Musculoskeletal conditions were most commonly reported, with a prevalence of 18.4%. Back pain accounted for over half of these reports. Other chronic pain conditions including migraines and headaches were reported by 6% of participants. The other most common long-term conditions were emotional and mental illnesses, reported by 11.3% of participants, and disorders of the digestive system, reported by 5.2% of participants. Similar results were found by the New South Wales survey where 39% of women reported a long-term condition, most commonly involving the musculoskeletal system or connective tissue.

Over half the participants in the older age group (aged 40 years or older) reported at least one long-term condition compared to a third of younger participants (aged 17-24 years). Those on social security benefits were 1.9 times more likely to report a long-term condition than those of other employment status.
HEALTH SERVICES UTILISATION

Ninety-six percent of women had used the prison clinic at some time in the past. 43.3% attended the clinic regularly for repeat medications, most commonly psychiatric medications, methadone or buprenorphine, and analgesics. Compared to New South Wales (58%), fewer Queensland participants attended the prison clinic regularly. Non-Indigenous women were 1.6 times more likely to be regular clinic attenders than Indigenous women.

When asked about clinic attendances within the last four weeks, 56.6% (n=120) of women had attended at least once, excluding repeat medication visits. This is similar to New South Wales’ findings (59%). In Queensland, 12.7% of women attended the clinic five or more times during this period. Participants were asked the reasons for their most recent visits within the last four weeks, detailing up to three visits. Table 1 shows the most frequent responses including pain (19% of reported visits), musculoskeletal complaints such as back or joint symptoms (9% of reported visits), and digestive system complaints such as vomiting or diarrhoea (9% of reported visits).

<table>
<thead>
<tr>
<th>Reason</th>
<th>No. of reported visits</th>
<th>% of reported visits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pain</td>
<td>48</td>
<td>18.9</td>
</tr>
<tr>
<td>Musculoskeletal complaints</td>
<td>23</td>
<td>9.1</td>
</tr>
<tr>
<td>Digestive system complaints†</td>
<td>23</td>
<td>9.1</td>
</tr>
<tr>
<td>Reproductive system related</td>
<td>19</td>
<td>7.5</td>
</tr>
<tr>
<td>Blood test/result</td>
<td>18</td>
<td>7.1</td>
</tr>
<tr>
<td>Emotional/mental illness</td>
<td>17</td>
<td>6.7</td>
</tr>
<tr>
<td>Skin complaint</td>
<td>11</td>
<td>4.3</td>
</tr>
<tr>
<td>Treatment review or check-up</td>
<td>10</td>
<td>4.0</td>
</tr>
<tr>
<td>Pregnancy related</td>
<td>10</td>
<td>4.0</td>
</tr>
</tbody>
</table>

δ including non-specific abdominal pain (n=6 visits)
†excluding non-specific abdominal pain

Participants were asked what action the clinic nurse took at these most recent clinic visits. Most commonly, medication was given (42.7% of reported visits). Clinic nurses also frequently performed a procedure (12.6% of reported visits) such as a blood test or wound dressing, counselled or provided information (10.3% of reported visits) and referred to a doctor or other health professional (8.7% of reported visits). In 5% of visits, no action was taken by the clinic nurse.

Participants rated their most recent clinic visit as ‘fairly good’ or ‘excellent’ in 50.5% (n=107) of cases. 10.4% (n=22) of women found their last visit to be ‘not too good’ or ‘not good at all’.
23.6% of women found clinic visits to be insufficiently private, and 36.3% thought that health staff did not maintain confidentiality. Those who felt that confidentiality was breached (n=77) gave reasons such as custodial officers having access to prisoners’ health information (19.5%), health or clinic staff discussing patients in public (16.9%), lack of privacy surrounding the clinic consultation (11.7%) and medical files not remaining confidential (7.8%). When asked specifically about the sharing of medical information between health and custodial staff, 42% of women felt this occurred.

<table>
<thead>
<tr>
<th>Reason</th>
<th>Number of women</th>
<th>Percent of women</th>
</tr>
</thead>
<tbody>
<tr>
<td>Check-up, treatment review</td>
<td>44</td>
<td>20.8</td>
</tr>
<tr>
<td>Musculoskeletal condition</td>
<td>23</td>
<td>10.8</td>
</tr>
<tr>
<td>Reproductive system related</td>
<td>22</td>
<td>10.4</td>
</tr>
<tr>
<td>Pain</td>
<td>18</td>
<td>8.5</td>
</tr>
<tr>
<td>Emotional or mental illness</td>
<td>16</td>
<td>7.5</td>
</tr>
<tr>
<td>Skin condition</td>
<td>13</td>
<td>6.1</td>
</tr>
<tr>
<td>Blood tests/results</td>
<td>10</td>
<td>4.7</td>
</tr>
<tr>
<td>Ear, nose or throat condition*</td>
<td>8</td>
<td>3.8</td>
</tr>
<tr>
<td>Digestive system complaintξ</td>
<td>8</td>
<td>3.8</td>
</tr>
<tr>
<td>Pregnancy related</td>
<td>8</td>
<td>3.8</td>
</tr>
<tr>
<td>Other</td>
<td>29</td>
<td>13.7</td>
</tr>
<tr>
<td>Not specified/not answered</td>
<td>13</td>
<td>6.1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>212</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Δ including non-specific abdominal pain (n=7) and ear pain (n=2)
* excluding ear pain
ξ excluding non-specific abdominal pain

The vast majority of participants (78.3%) reported seeing a doctor about their health within the last six months, reiterating the findings of the New South Wales survey (78.8%). In Queensland, 52.8% of women had seen a doctor within the last month. For 78.3% of Queensland participants compared to 68.9% of New South Wales participants, the last doctor consulted was a prison doctor. The purpose of the last doctor’s visit was for a check-up or treatment review in 20.8% of cases. Musculoskeletal conditions (10.8%), particularly back pain (6.6%), reasons relating to the reproductive system (10.4%) such as pap smears and menstrual disorders, and pain (8.5%) were also common reasons for the last doctor’s visit as seen in Table 2. 59.4% of women rated their last doctor’s visit as ‘fairly good’ or ‘excellent’, and 15.6% rated it as ‘not too good’ or ‘not good at all’. 
ASTHMA

Asthma affects 36.3% of women prisoners in Queensland (n=77), a prevalence mirroring that of the New South Wales survey and more than tripling the national prevalence of 11.3% (Australian Institute of Health and Welfare, 2002). Almost half of these women (46.8%) had not experienced an asthma attack within the past three months. From one to three attacks were experienced by 28.6% of women with asthma in that period, while 24.6% experienced four or more attacks in the previous three months. The vast majority (91.4%) of women with asthma were satisfied with the treatment they received for it in prison.

Women with asthma were reasonably proactive, with 87.0% taking steps to treat or prevent their asthma symptoms (n=67). The strategies used for this purpose and their prevalence amongst this group are presented in figure 9. These women rely heavily on medication for the treatment and control of their asthma symptoms. Alternative natural strategies were used by a proportion of women (ranging from 16.4% to 28.4%), however, these medication-free strategies appear to have been under-utilised amongst this population of female prisoners in Queensland. In the New South Wales survey, women with asthma demonstrated a similar reliance on medication, however the use of medication-free strategies to help their asthma was lower again, with 3% having quit smoking and none using exercise or other strategies to control their asthma.

![Figure 9: The proportion of asthmatics reporting use of common strategies for treatment and control of asthma.](image)

In contrast to self-reported medication utilisation as illustrated above, medical chart review identified 51.9% of asthma sufferers who used medication. In addition, three women who were not self-reported asthmatics were found to have used medication that would typically be prescribed for asthma.

Demographic variables associated with the prevalence of asthma were outlined in the general health section of this report. Other associations of note pertain to lifestyle modifications in controlling asthma. Women incarcerated in southern Queensland were two and a half times more likely to make lifestyle changes to control their asthma symptoms, and repeat offenders were less likely to undertake such changes. There was no association between asthma and smoking for this study. This is almost certainly due to the high smoking rate of 82.5%.
**Peak Expiratory Flow Rate**

The best of three peak expiratory flow rates (PEFR) using an AIRMED mini-Wright Peak Flow Meter was recorded for consenting participants. Overall, the mean PEFR was 394 L/min, slightly higher than the corresponding values for New South Wales participants (365 L/min).

Predicted values for PEFR and the lower fifth percentile according to age and height were calculated using the formula as given by Quanjer, Tammeling, Cotes, Pedersen and Yernault (1993). This calculation does not account for racial differences. Measured PEFR’s were compared to these predicted values. A PEFR below the fifth percentile was considered problematic. It should be remembered that peak flow measurements are effort dependent and can physiologically vary by up to 20% in healthy individuals over the course of a day (Quanjer et al., 1997).

Thirty-three women (15.6%) had a PEFR less than the fifth percentile for their height and age. Women who had been diagnosed with asthma were twice as likely to have a PEFR indicative of inhibited respiratory function than those who had not. Smokers were 3.2 times more likely to have a PEFR below the fifth percentile compared to non-smokers. Indigenous participants were 2.2 times more likely to have a PEFR in the problematic range than non-Indigenous participants. This may reflect a greater prevalence of inhibited airway function in this group or may result from the failure of the predicted calculations to account for physiological racial differences. The highest level of education achieved was inversely related to inhibited respiratory function.

**BLOOD SUGAR**

Thirteen women from this sample had been diagnosed with diabetes (6.2%), a prevalence matching that of the New South Wales sample, but contrasted with the Ausdiab prevalence of 0.3% for women 25-34 years old and 2.5% for 35-44 year old women (Dunstan et al., 2001). An additional five women in the Queensland sample had been diagnosed with gestational diabetes, and a further six had been told by a doctor or nurse that they had high blood sugar. Of the thirteen diabetics, five were diagnosed as adolescents, six were adults below the age of forty and the remaining two were over forty years old when diagnosed.

Blood glucose (non-fasting) was available for twelve of the thirteen known diabetics. Of this group, seven women had a blood glucose level in the post-prandial target range of 8.0mmol/L or less (Diabetes Australia, 2002), and the remaining five women had blood glucose exceeding this level. Two diabetic women had particularly high blood glucose levels at 16.1 and 18.3mmol/L. Non-fasting blood glucose was also available for 158 women who were not known diabetics. 123 women had normal blood glucose of 5.5mmol/L or less, and 34 of these women (21.5%) had a blood glucose level higher than 5.5mmol/L. Overall, analysis of blood glucose levels identified 46 women as problematic either because they were known diabetics or were at risk with a random plasma glucose level of more than 5.5mmol/L.
Treatment for diabetes can be in the form of a specific diet, tablets, insulin injections or a combination of these. Table 3 outlines the recommended treatment strategies and compliance for the thirteen diabetics in this sample.

<table>
<thead>
<tr>
<th>Recommended treatment</th>
<th>Number recommended</th>
<th>Number currently receiving</th>
</tr>
</thead>
<tbody>
<tr>
<td>Special diet</td>
<td>13</td>
<td>5</td>
</tr>
<tr>
<td>Tablets</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td>Injections</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>No treatment</td>
<td>N/A</td>
<td>7</td>
</tr>
</tbody>
</table>

Although only six women reported taking medication for their diabetes, medical chart review indicated a total of eight women who had been prescribed diabetic medication. Three of these women had random blood glucose levels within the target post-prandial range, while the other five exceeded this range.

When asked if they were satisfied with the treatment they received in prison for diabetes, only ten women answered. Six women were dissatisfied with their treatment. All six felt that their dietary needs were not adequately fulfilled.

Seventy-five women from this sample of 212 reported having received a blood sugar test in the last year. Fifty-one of these women were tested in prison, sixteen in the community, and three were tested in both settings. Five women were unable to remember.

The prevalence of diabetes increased as age increased, as did the likelihood of being identified as having problematic blood glucose. Diabetes was more prevalent amongst Indigenous women, however this association did not hold for at risk women with problematic blood glucose higher than 5.5mmol/L. Because diabetes is more prevalent among Indigenous people than non-Indigenous people, the proportion of Indigenous women screened for diabetes in the previous year was greater than non-Indigenous women.
EXERCISE AND BODY IMAGE

Physical Activity
The self reported level of exercise amongst this group of female prisoners is high for those who do exercise. Exercise is a difficult factor to measure and the time and intensity of self-reported information is generally unreliable. From the available data, there is little scope to differentiate intensity of exercise and so exercise sessions are simply presented as a cumulative indicator of the average time spent exercising per week for each individual. Over a third (35.1%) either did no exercise or less than an hour of exercise per week. Between one and five hours were spent exercising by 30.8%, and 17.1% exercised for each of six to ten hours and more than ten hours per week. Exercise ranged from garden labouring to exercise classes and team sports.

Physical activity is an important factor in the prevention of chronic disease. The Ausdiab study (Dunstan et al., 2001) and the AIHW (2002) report physical activity in terms of ‘sedentary’, insufficient’ and ‘sufficient’ physical activity, whereby sedentary refers to no exercise at all in the previous week, insufficient activity is up to but less than 150 minutes of physical activity in the previous week, and sufficient activity is 150 minutes or more of physical activity in the previous week. A comparison of the physical activity levels of the study sample and women from the Ausdiab study who were of a similar age to the majority of the prison sample is made in figure 10. The prison sample features a lower rate of sufficient physical activity overall, and a lower proportion of women doing some, but not enough physical activity (<150 mins/week) than their community based counterparts. The proportion of sedentary women in the prison sample is more than double that of the Ausdiab women. These findings indicate that the majority of women in Queensland prisons do insufficient exercise to obtain health benefits necessary to assist in the prevention of chronic disease.

![Figure 10: Physical activity levels for the study sample and for women aged 25-34 in the Ausdiab study (Dunstan et al., 2001).](image)

The exercise activities available for prisoners were dependent upon their location and security classification within that centre. Facilities and organised activities such as group exercise classes vary and not all options were available for all prisoners. Other restrictions include the amount of time for which exercise
activities and facilities were available for prisoners. This varied according to individual circumstances such as if they worked within prison, if they had an infant with them in prison, and their security classification.

A total of seventy-six women did less than an hour of exercise per week, and fifty-nine of these women did no exercise at all. Just under half of these non-exercisers could not be bothered to exercise. Health reasons stopped 23.7% and 22.0% were too busy with work to exercise. A few other women were prevented from exercising because they were tired all of the time, and due to restrictions arising from protection issues.

The most popular forms of exercise undertaken in prison were circuit classes, tennis, riding an exercise bicycle, walking and volleyball. Other activities used to a lesser extent included jogging, weight training, netball and basketball. Perhaps due to differing activities available, New South Wales women preferred other exercise forms, the most popular were vigorous walking, aerobics, weights and riding an exercise bicycle.

The majority of women considered themselves to have been physically active in the twelve months prior to coming to prison (n=163). 38.9% considered themselves very physically active, and 38.4% considered themselves fairly physically active. Of the 48 who did not consider themselves active, 17.5% overall considered themselves to have been not very physically active, and 4.7% considered themselves not active at all.

In the twelve months before imprisonment, almost half (46.0%) reported completing 30 minutes or more of moderate exercise five or more days each week. This was done by 17.0% between one and four times a week, and between weekly and monthly by only seven women (3.3%). A third (33.6%) exercised moderately for 30 minutes or more but did so less than once a month. While there are numerous women reporting low levels of exercise, there are many more reporting high levels of exercise on five or more days a week. This is likely to be a gross over-estimation of the amount of exercise partaken by many of the women in this high frequency group.

Changes to activity level after imprisonment are of interest in monitoring the ongoing health of prisoners. Over half of the women in prison (55.9%) considered themselves less active currently than before imprisonment, yet almost a third (32.7%) felt they were more active in prison. Only nineteen women felt that they were about as active in prison as they were in the community. Of the eighty-two women who considered themselves very physically active before imprisonment, 78% were less active since coming to prison, and 53.1% of those who were fairly physically active prior to prison were less active since coming to prison. Conversely, 64.9% of women who considered themselves not very physically active and 90.0% of those not at all physically active were more active since coming to prison. Hence women who are physically active in the community are likely to be less active in prison, and women who are quite sedentary in the community are likely to be more physically active in prison.
The proportion of women doing no exercise was elevated amongst those with low levels of education and amongst repeat offenders, and women in the northern centre do less exercise overall than their southern counterparts. Similarly, sufficient exercise was associated with education levels and location of prison. Of women receiving education to year 9 or less, 42.9% were sedentary, and 44.4% of women in northern prisons were sedentary. The reported frequency of exercise in the year before imprisonment was higher for Indigenous women, and the frequency decreased as the total amount of time spent in prison increased.

**Body Mass Index**

The Body Mass Index (BMI) was calculated for 204 women from the sample, with values ranging from 16.4 to 43.9. The following categories were used for BMI: normal weight, BMI<25.0; overweight, BMI=25.0-29.9; and obese, BMI=30.0 or higher. Overall, 44.1% of those for whom height and weight were available were overweight or obese. The distribution for BMI was very similar to that for the New South Wales sample of women, however these findings were somewhat different to population comparisons. When compared with women aged 25-34 in the Ausdiab study (Dunstan et al., 2001), there were fewer women in the normal weight range and greater obesity for the prison sample.

![Body Mass Index categories for the study sample (n=204) and women aged 25-34 from the Ausdiab study (Dunstan et al., 2001).](image)

**Body Image**

An increase in weight since going to prison was reported by 61.2% of the sample, while 20.1% had stayed about the same weight and 18.2% had decreased in weight since imprisonment. When asked to comment on their current weight, most women felt they were either normal weight (47.9%) or overweight (35.5%). Few women classified themselves as very overweight (8.1%) or as underweight (5.7%). The proportion of women who felt they were overweight was high at 43.6%. The reported increases of weight since imprisonment were spread across women of all weight categories.

Over half of the sample (n=108) claimed to be unhappy with their current weight. Two of the fifteen women who felt that they were very overweight were happy with their weight, and seventeen of fifty-six women who felt that they were overweight were happy with their weight. 73% of those who considered
themselves to be within normal weight and half of those considering themselves underweight were happy with their weight. Hence women who consider themselves to be overweight or very overweight are less likely to be happy with their current weight, while those who consider their weight to be normal are most likely to be happy with their current weight.

Of the 108 women who were not happy with their weight, thirty-four wanted to change their weight “a bit”, twenty-seven wanted a ‘slight’ change in their weight and thirty-five wanted to be ‘much’ thinner or fatter.

Weight perception was associated with employment status before imprisonment. Those who had been unemployed were less likely to currently perceive themselves as overweight and more likely to perceive themselves as being in the normal weight category, while those who had been employed were more likely to perceive themselves as overweight. Women incarcerated in the south and those in prison on remand were more likely to report being happy with their current weight than those in the north and sentenced prisoners.

BMI was significantly associated with perception of body weight and happiness with body shape. Women who had a BMI in the obese range were more likely than others to feel that they were overweight and were less likely to be happy with their current weight. BMI was significantly associated with perception of body weight and happiness with body shape. Women who had a BMI in the obese range were more likely than others to feel that they were overweight and were less likely to be happy with their current weight.
DIET AND NUTRITION

Participants were asked numerous questions regarding their consumption of standard and additive dietary components. Table 4 presents a summary of the consumption of specific foods and food groups.

<table>
<thead>
<tr>
<th>Food item</th>
<th>Percent consumed</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Highly nutritious</strong></td>
<td></td>
</tr>
<tr>
<td>Daily vegetables/salad</td>
<td>81.5</td>
</tr>
<tr>
<td>5+ serves of vegetables/salad per day</td>
<td>10.2</td>
</tr>
<tr>
<td>Daily fruit</td>
<td>69.7</td>
</tr>
<tr>
<td>2+ serves of fruit per day</td>
<td>40.7</td>
</tr>
<tr>
<td>Bread/rolls daily</td>
<td>65.9</td>
</tr>
<tr>
<td><strong>Additives</strong></td>
<td></td>
</tr>
<tr>
<td>Use of sweetener</td>
<td>80.6</td>
</tr>
<tr>
<td>Use of butter/margarine</td>
<td>80.1</td>
</tr>
<tr>
<td>Additional salt</td>
<td>53.1</td>
</tr>
<tr>
<td><strong>Poor Nutrition</strong></td>
<td></td>
</tr>
<tr>
<td>Fries weekly</td>
<td>45.7</td>
</tr>
<tr>
<td>Crisps weekly</td>
<td>19.9</td>
</tr>
<tr>
<td>Biscuits/cakes weekly</td>
<td>46.4</td>
</tr>
<tr>
<td>Sweets/lollies weekly</td>
<td>51.9</td>
</tr>
<tr>
<td>Soft drink weekly</td>
<td>51.2</td>
</tr>
<tr>
<td><strong>Index &gt;= one bad item per day</strong></td>
<td><strong>20.8</strong></td>
</tr>
</tbody>
</table>

It is recommended that we eat 5 or more servings of vegetables (half a cup) and 2 or more pieces of fruit each day. Overall, 10.2% of the sample met these dietary guidelines for vegetables, and 40.7% met the guidelines for fruit consumption. Two women reported eating vegetables or salad less than once a month, and fourteen women reported eating fruit less than once a month. These simple measures of consumption rates indicate the poor nutritional value of the diets of women in prison. It must be noted that main meals are catered, and the degree of control that women have over the foods available for them to eat varies across centres and security classifications. In low security sections, the women often do the cooking themselves in their unit and have far greater input into the food available for them than women in high security units. An index of the consumption of foods of poor nutritional value was created using daily consumption of one or more food items within the poor nutrition group listed in the table. 20.8% of women reported daily consumption of one or more of the poor nutritional foods.

A system is available in prison for women to purchase items through an ordering system using trust accounts. Table 5 presents the most commonly purchased food and beverage items through the ‘buy-up’ system. It is evident from the table that the most frequently purchased items are typically high in sugar and or
fat, and low in dietary fibre and nutrients. The food items of poor nutritional value listed previously in table 4 feature as popular items on the ‘buy up’ list.

**Table 5: Most commonly reported food items purchased through ‘buy-up’.

<table>
<thead>
<tr>
<th>Food item</th>
<th>Frequency purchasing item</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lollies</td>
<td>57</td>
</tr>
<tr>
<td>Chocolate</td>
<td>52</td>
</tr>
<tr>
<td>Coffee/tea</td>
<td>46</td>
</tr>
<tr>
<td>Biscuits/cakes</td>
<td>34</td>
</tr>
<tr>
<td>Crisps</td>
<td>33</td>
</tr>
<tr>
<td>Cereal/museli bars</td>
<td>25</td>
</tr>
<tr>
<td>Fruit/fruit juice</td>
<td>24</td>
</tr>
<tr>
<td>Drinks (incl. soft drink &amp; cordial)</td>
<td>23</td>
</tr>
<tr>
<td>Noodles</td>
<td>22</td>
</tr>
<tr>
<td>Crackers/savoury biscuits</td>
<td>19</td>
</tr>
<tr>
<td>Sultanas</td>
<td>12</td>
</tr>
</tbody>
</table>

When asked about their overall satisfaction with the food provided in prison, 58.8% responded positively and were satisfied with the food. They were asked to explain why they were or were not satisfied with the food in prison, and 141 participants made comment. The object of comments varied from the variety and size of portions to the meat and vegetable content and nutritional value. Two thirds of comments made were critical and negative in some respect. Because comments were either very broad or quite specific, there is little point in presenting a summary of these comments.

A total of 48 women (22.7%) claimed to be on a special diet in prison. Half of these women were vegetarians, a quarter was on a low fat diet, and nine required a special diet for diabetes. Other specific diets were high fibre and high carbohydrate diets. Over half of these women (n=25) reported having problems receiving their special diet in prison. The most common problems were that the individuals were not receiving their special diet (n=7) or did not consistently receive it (n=7), and that they were unhappy with the food supplied for their particular dietary needs (n=6).

Women with diabetes or measured high blood pressure were more likely to be on a special diet, and diabetics were less likely to eat 5 or more serves of vegetables a day. Women who reported eating 2 or more pieces of fruit each day were more likely to be happy with their current weight. Consuming at least one food item of poor nutrition on a daily basis was associated with low levels of exercise.

Associations were identified between satisfaction with prison food and being happy with their current weight, as well as having used an illicit drug regularly in the 12 months prior to imprisonment.
The daily consumption of low nutrition foods was associated with low levels of education. Women in northern Queensland were more likely to eat sufficient fruit than their southern counterparts. Women aged 35 and older, repeat offenders, and those who had been in prison for more than two years were more likely to be satisfied with the food provided in prison.

**SKIN PROTECTION**

The use of strategies to protect the skin from sun exposure is poor amongst female prisoners. Over 50% rarely or never wore a hat and 66.4% rarely or never wore sunscreen when in the sun (67% and 56% respectively for New South Wales), yet over 55% reported wearing sunglasses most of the time when in the sun (42% in New South Wales). In contrast, 70% rarely wore less clothing in order to increase sun exposure (59% in New South Wales). These results indicate while the majority of these women do not take precautions to protect their skin from damage caused by sun exposure, they do not deliberately attempt to increase their sun exposure.

The level of sun exposure demonstrates that a large number of women in this group have had a great deal of daily sun exposure. 27.6% spent an hour or less in the sun each day, 26.2% spent one to two hours in the sun, 20.5% spent two to four hours in the sun and 25.7% received four hours or more of sun exposure on a daily basis. Queensland women reported fewer hours of sun exposure compared to women in the New South Wales survey, where 37% of women received four hours or more of sun exposure each day.

Last summer, some severe sunburn events were suffered by 24.3% of the women, and only 5.2% suffered many (five or more) incidents of severe sunburn where the skin was sore the following day. This indicator of long-term exposure reinforces the notion that these women have not actively sought sun exposure, however the low proportions who had their skin checked similarly reinforces that they were not proactive in minimising the exposure and preventing skin cancer. Skin checks within the last twelve months were undertaken many times by 13.7%, and from one to four times by 19.0%. This leaves the vast majority having had no skin check made in the last twelve months. The rate of skin checks is comparable to that for New South Wales.

The level of education was associated with the degree of sun safety practices upheld. As the level of education increased, the likelihood of wearing a hat, sunglasses and sunscreen when in the sun increased. Sunglasses were worn less frequently by Indigenous women and those who were unemployed or receiving a pension prior to imprisonment. Sunscreen was less likely to be used by women incarcerated in the north, repeat offenders and those who were unemployed prior to imprisonment. It was more likely to be used by those incarcerated for fraudulent offences and those who were employed prior to imprisonment. The likelihood of having had a skin check within the previous year was greater for non-Indigenous women incarcerated in the south than for non-Indigenous women in the north and for Indigenous women across the state.
DENTAL HEALTH

Ninety five percent of women (n=202) in prison clean their teeth daily, similar to the 97% who brushed daily from the New South Wales survey. Only eight women in this survey did not clean their teeth at all the day before this survey and two provided no information regarding teeth cleaning. Twenty-two women cleaned their teeth once on the previous day, while the remainder cleaned their teeth at least twice. These rates are similar to the self-reported rates in Australian and Queensland female populations (Barnard, 1993; Porter, 2000).

Similar to New South Wales findings, 65% of the women in Queensland prisons (n=137) had visited a dentist in the previous year and an additional 14% (n=29) had visited within two years. Forty women had seen a dentist more than two years ago, three did not know when their last dental visit was, and two had never visited a dentist before. Most women who visited a dentist in the past twelve months had only one visit, 17.5% (n=37) had two or three visits and 9.9% (n=21) had four or more visits. In Australia, sixty two percent of adult females visited a dentist in a 12 month period with an average number of visits of two per year (Carter, 1995).

More than half the total sample (n=125) had their last dental visit in prison. The last visit for the remaining women was to a private dentist (n=39), a public dental clinic (n=33), an Indigenous dental service (n=3), or a school dental service (n=5). Four women were unable to recall where their last visit occurred and three women did not answer the question.

During their last dental visit, 42.1% of respondents (n=88) reported having a tooth extracted, 33.5% (n=70) had a filling or crown, 9.6% (n=20) had denture-related treatment and 3.8% (n=8) had orthodontic treatment. There was a higher rate of extractions and lower rate of restorations than for the Australian population of whom 14% reported extractions and 51% reported fillings at their last visit (Carter, 1995). 74.6% of participants had an examination at their last visit (n=156), 30.1% had their teeth cleaned (n=63) and eleven percent had fluoride treatment (n=23). Due to the varied means of gathering this information, it is difficult to compare these figures with Australian data from the last 10 years. However, the closest comparisons would indicate a similar rate of examination (65-75%) and slightly higher levels of preventive services for the women in prison (Porter, 2000).

When rating the care they received during this last dental visit, 52% (n=110) of women reported that it was fairly good to excellent, 21% (n=44) thought the care was ‘okay’. Seventeen women rated the level of care as ‘not too good’ and thirty-three felt it was ‘not good at all’. In an Australian Dental Satisfaction Survey (Stewart and Spencer, 1995), between 76 and 80% of respondents were satisfied with the overall dental treatment they received, therefore the level of satisfaction in this survey (73%) compares favourably with the Australian norm. Of those women who had their last dental visit with the prison dental service (n=125), 66.4% were satisfied with their care (n=83). This is a slightly lower satisfaction rate than for those who had their treatment outside the prison. The severity of dissatisfaction is much higher for those women who received prison care than for
those who were treated outside the prison. Twenty-six of the thirty-three women whose care was ‘not good at all’ were seen last by a prison dentist.

Important associations between dental health characteristics and demographic variables are discussed in the following paragraphs. The trends shown with variations in age, education, employment, Indigenous background and regional towns are consistent with those in the general population.

Indigenous women in northern centres were less likely than others to have visited a dentist within the last year or two. Women who had achieved an education level higher than year ten had seen a dentist more recently than less educated women. The last dental visit was more likely to have been through a private consultation for women over the age of forty, for those with any post-secondary education, for sentenced prisoners, and for those imprisoned for fraud. Indigenous women tended to have their last visit at a community-based public dental service. Repeat offenders and women who had spent an increasing amount of time in prison were more likely to have seen a prison dentist for their last visit.

Tooth extractions were particularly frequent at the last dental visit for Indigenous women, and those who were unemployed or receiving a pension before coming to prison. The likelihood of having had a tooth extracted decreased as age increased. Being imprisoned for fraud and drug offences was associated with a lower rate of extractions at the last dental visit, as was having spent a total of two years or more in prison. There were no significant relationships between extractions and the location of the last dental visit (private practice, public clinic or prison service). Fewer women incarcerated in the north reported having a filling or crown during their last dental visit than their southern counterparts.
INJURY

An injury was sustained within the previous 3 months by 20.9% (n=44) of participants. Seven of these women sustained two injuries, and one woman sustained three injuries during that time, therefore, a total of 53 injuries were reportedly sustained during the previous 3 months. Figure 12 presents the most commonly sustained injuries.

Figure 12: Classification of the injuries sustained during the previous three months.

While the majority of injuries were relatively minor, fracture was the single most frequent injury. Numerous causes of injury were reported, including: being struck by an object or person (n=15); falling from a low height (n=12); cutting, piercing or stabbing (n=7); machinery (n=4); accidents driving a motor vehicle (n=3) and other causes (n=12). The majority of injuries (n=39) were considered to be accidental, and 2 were due to an underlying medical condition (epileptic and drug related seizures). Of the remaining 12 intentional injuries, 3 were self-inflicted (2 injuries were to the same person) and 9 were the consequence of assault by others (including one case of domestic violence).

Thirty-six of the 53 injuries reported were sustained while in corrective custody (67.9%). Activities undertaken at the time of injury included: sport and leisure (n=20); paid work, including prison work (n=12); during transportation between prisons (n=1); while being arrested (n=1) and unspecified activities (n=17). Thirteen women received hospital attention, with ten admissions, 16 women saw a doctor and 21 saw a clinic nurse. Three women treated their injury themselves. It is likely that minor self-treated injuries were unreported.

Injury was not associated with any demographic variables or important health-related factors.
SMOKING

Of 212 women interviewed, only nineteen reported having never smoked a full cigarette. The remainder are almost all current smokers, with an overall prevalence of 82.9% for current smoking, slightly higher than the New South Wales finding of 77%. Figure 13 presents the smoking status for the prison sample in comparison with the 25-34 year old women from the Ausdiab study (Dunstan et al., 2001), where the greatly elevated prevalence of smoking in the prison sample is clearly demonstrated. The proportion of current smokers in prison is almost four and a half times the rate in the general community for women of a similar age.

![Figure 13: Smoking status of the prison sample and women aged 25-34 from the Ausdiab study (Dunstan et al., 2001).](image)

Note: Non-smokers are those who have smoked less than 100 cigarettes in their life.

Current smokers tended to start smoking at a young age. 10% of those who have smoked a full cigarette first did so at the age of nine or younger. The youngest reported age was three years old. Half began smoking from ten to fourteen years old, a quarter began from fifteen to nineteen years old, and 10% first smoked at the age of twenty or older. The remainder did not disclose the age they first smoked. The mean age of initiation for smoking amongst this sample was 14.6, slightly younger than the Queensland mean of 15.6 years old (Australian Institute of Health and Welfare, 2000).

Those who were not current smokers numbered 36 in total. Nineteen of these women had never smoked, six had smoked less than one hundred cigarettes in their life and only eleven were ex-smokers who had smoked more than one hundred cigarettes in their life. Data was not obtained regarding the time since they had smoked regularly.

Results indicate that smokers are more likely to smoke when in prison than in the community. 92% of current smokers were smoking cigarettes in the twelve months before coming into prison, hence smoking was taken up by 8% of smokers after they were admitted to prison. Almost half (48.6%) felt that they smoked more in prison than before they came into prison, 20% smoked about the same amount, and 31.4% smoked less at the time of the survey than before they went into prison.
Only 2% of current smokers reported smoking less frequently than daily. A third (33.1%) smoked 5-10 cigarettes a day, 37.7% smoked 11-20 cigarettes a day, and 26.9% smoked more than 20 cigarettes each day. Because hand-rolled cigarettes are not standardised in any way, comparisons between smoking rates are less accurate than for tailor-made cigarettes, however comparison of the amount of tobacco consumed each week is considered a fairly reliable alternative.

Current smokers tended to smoke mainly hand rolled cigarettes (86.3%). This appears to be because hand-rolled cigarettes are much cheaper than tailor-made cigarettes. Of those who used predominantly hand-rolled cigarettes, 81.5% smoked the equivalent of 50g of tobacco or less each week. 100g per week was smoked by 12.6%, 150g or more per week was smoked by 4%, and a further 4% did not answer the question.

Amongst this group of current smokers, some strategies had been utilised within the previous year regarding reducing or quitting smoking. 12% had successfully given up smoking for more than one month, however 30.3% tried unsuccessfully to give up smoking in that year. 16% changed brands to reduce the tar or nicotine content of the cigarettes and 8% used nicotine patches. Three individuals used other strategies such as zyban or nicotine gum, and only one person attended a quit smoking program in prison in the twelve months before the survey. Despite this low level of program utilisation, 58.9% of current smokers planned to give up smoking either within the next three months (20%) or at a later time not within three months (38.9%). Additionally, 69.1% stated that they would like to quit smoking, and 48% (of current smokers) felt that they would require assistance to quit smoking.

Because smoking has such a high prevalence amongst the study sample, there were few associations of note between smoking patterns and demographic variables. The prevalence of current smoking decreased as age increased, with more remand prisoners and repeat offenders smoking currently than sentenced and first-time inmates. Indigenous women were more likely, and repeat offenders were less likely to have tried unsuccessfully to quit smoking in the previous year. Repeat offenders were more likely than first-time inmates to be planning to quit smoking, and planned to do so sooner. In contrast, repeat offenders were also less likely to report that they would like help to quit smoking. More women incarcerated in the north reported that they would like to quit smoking and reported needing help to quit than those in the south.
ALCOHOL CONSUMPTION (AUDIT)

23.2% of women in the study were identified as harmful drinkers, while a further 14.7% demonstrated hazardous alcohol consumption patterns. The remaining 62.1% maintained safe drinking habits. These scores for alcohol consumption in the year before imprisonment were calculated using AUDIT, a standardised tool developed by the World Health Organisation. Figure 14 illustrates the proportions for each of the AUDIT alcohol consumption categories in Queensland.

![Proportion of the sample in each of the AUDIT categories for alcohol consumption for Queensland.](image)

24.2% of women claimed to be non-drinkers, consuming no alcohol in the year before imprisonment. 42.2% drank alcohol as often as once a week, and 33.6% drank alcohol more than once a week during that time. One third of women (33.2%) had a partner who they felt drank too much, and almost half, (45.0%) had at least one parent who they felt drank too much.

Women who had reported being diagnosed as alcohol dependent were much more likely to have an AUDIT score in the hazardous or harmful consumption ranges, indicating that few of these women had managed to control their alcohol dependence prior to their imprisonment. Women who reported that their partner drank too much were more likely to be harmful drinkers themselves (based on their AUDIT score) than those who did not feel that their partner drank too much. Those who had experienced physical abuse as a child were more likely to drink harmfully.

The AUDIT scores indicated that the proportion of Indigenous women who were harmful drinkers (53.8%) was four times that for non-Indigenous women (13.2%). 71.4% of Indigenous women in the north drink at harmful levels, compared with 33.3% of Indigenous women in the south, 13.5% of non-Indigenous women in the south, and 11.5% of non-Indigenous women in the north. Safe alcohol consumption occurred in 80.8% of northern non-Indigenous women, 69.2% of southern non-Indigenous women, 41.7% of southern
Indigenous women and 28.6% of northern Indigenous women. The proportion of Indigenous women who drank more than once a week was more than double that for non-Indigenous drinkers (57.7% and 25.8%, respectively). The frequencies of non-drinkers were equal for Indigenous and non-Indigenous women (23.1% and 24.5%, respectively), a result that differs from community rates. Within the community, the majority of Indigenous women are non-drinkers and those who do drink alcohol are harmful drinkers, with very few women drinking at a moderate frequency. The results of this study indicate that non-drinking Indigenous women are under-represented in Queensland prisons, while women who drink harmfully are over-represented in that context.

The frequency with which these women drank alcohol before imprisonment was also significantly associated with education, region and type of offence. Twice as many women with a low level of education were non-drinkers compared to more educated women. Women imprisoned for drug-related offences were more likely to be non-drinkers than those imprisoned for other offences, with those who committed violent offences more likely to drink more frequently than once a week. These results for offence type are replicated with the AUDIT scores. Similarly, both drinking frequency and AUDIT scores were higher for women incarcerated in northern correctional centres than their southern counterparts.

Younger women were more likely to report that at least one of their parents had drunk too much. Again, this was more common amongst Indigenous than non-Indigenous women. Women who were employed prior to imprisonment were less likely to report a parent having drunk too much, as were women imprisoned for fraudulent offences, while women imprisoned for property offences and other offences not including drugs, property, fraud or violence were more likely to have had a parent who drank too much.

Indigenous women incarcerated in northern Queensland were more likely to have a partner who drank too much (71.4%) compared to Indigenous women in southern Queensland (37.5%), non-Indigenous women in the north (42.3%) and non-Indigenous women in the south (22.6%). A higher proportion of sentenced prisoners than remandees had a partner who drank too much alcohol, and women imprisoned for violent offences were also more likely to have a partner who drank too much.
ILLICIT DRUG USE

Illegal drug use is common amongst female prisoners in Queensland. Those who have ever used an illegal drug represent 79.7% (n=169) of this group, a slightly higher prevalence than the 73% of New South Wales survey participants and 73.6% of all women in Queensland aged 20-29 (Australian Institute of Health and Welfare, 2000). In the Queensland prison sample, 62.7% (n=133) used an illegal drug regularly in the 12 months before they went to prison, compared with 39.2% of women aged 20-29 in Queensland who had used an illicit drug in the previous 12 months. The major drugs and the corresponding use by female prisoners are presented in table 6.

<table>
<thead>
<tr>
<th>Drug</th>
<th>Frequency having ever used (%)</th>
<th>Frequency using regularly in 12 months before prison (%)</th>
<th>Frequency having ever used in prison (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>cannabis</td>
<td>157 (74.1)</td>
<td>76 (35.8)</td>
<td>37 (17.5)</td>
</tr>
<tr>
<td>amphetamines/speed</td>
<td>123 (58)</td>
<td>75 (35.4)</td>
<td>17 (8.0)</td>
</tr>
<tr>
<td>opiates</td>
<td>100 (47.2)</td>
<td>69 (32.5)</td>
<td>30 (14.2)</td>
</tr>
<tr>
<td>tranquillisers/benzodiazepines</td>
<td>82 (38.7)</td>
<td>46 (21.7)</td>
<td>23 (10.8)</td>
</tr>
<tr>
<td>cocaine</td>
<td>75 (35.4)</td>
<td>25 (11.8)</td>
<td>3 (1.4)</td>
</tr>
<tr>
<td>crack/ice</td>
<td>26 (12.3)</td>
<td>9 (4.2)</td>
<td></td>
</tr>
<tr>
<td>ecstasy/designer drugs</td>
<td>65 (30.7)</td>
<td>19 (9.0)</td>
<td></td>
</tr>
<tr>
<td>LSD/acid</td>
<td>78 (36.8)</td>
<td>5 (2.4)</td>
<td>4 (1.9)</td>
</tr>
<tr>
<td>methadone</td>
<td>57 (26.9)</td>
<td>29 (13.7)</td>
<td>20 (9.4)</td>
</tr>
<tr>
<td>solvents/poppers</td>
<td>38 (17.9)</td>
<td>4 (1.9)</td>
<td></td>
</tr>
<tr>
<td>other</td>
<td>6 (2.9)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: results are presented as percentages of the total sample and cells are not mutually exclusive. Empty cells indicate that the prevalence was extremely low and could not be reliably reported.

Cannabis was the most commonly used drug, followed by amphetamines, opiates (predominantly heroin), tranquillisers and benzodiazepines, and cocaine. LSD/acid, ecstasy and designer drugs were also common. Similar patterns of drug preference were identified for the New South Wales survey, however opiates were more commonly used than amphetamines for that sample. Comparison with the Queensland population data for self-reported drug use demonstrates very different drug use patterns. Cannabis was the most commonly used drug in the community sample (69.6% of women 20-29), however few people had used heroin or cocaine (Australian Institute of Health and Welfare, 2000). The five most commonly reported drugs ever used amongst the Queensland population were cannabis, analgesics, hallucinogens, amphetamines and tranquillisers. One quarter of the Queensland female prisoners sampled...
(25%) reported having used drugs apart from their own methadone while in prison, and three women refused to disclose their drug use in prison.

The use of illicit drugs was more common in New South Wales prisons than in Queensland prisons, where cannabis use was reported by 32.5% and 17.5% respectively, opiates were used by 25% and 14.2% respectively, and tranquilisers were used by 21.2% and 10.8% respectively.

**Injecting Drug Use**

Injecting drug users were over-represented in this group of female offenders, with 55.7% (n=118) reporting having ever injected illicit drugs. This represented 69.8% of all drug users within the sample. Injecting drug use was more prevalent in New South Wales where 64% of the sample reported a history of drug injection. Both prison samples feature a much higher prevalence of injecting drug use than the Queensland population figures for women aged 20-29, where 7.4% reported a history of drug injection.

A broad range of drugs has been injected, including many drugs of traditionally alternative routes of consumption. These women reported being injecting drug users for an average of 10 years, with a range of less than one year and up to 27 years. The descriptive statistics for age at first injection and number of years of injecting are presented in table 7. For this sample the mean age of first injection was 18.3 years, younger than the mean age of initiation for heroin use in Queensland at 20.1 years (Australian Institute of Health and Welfare, 2000). The age of first drug injection was highly correlated with the age of first cigarette consumption (only two injecting drug users have never smoked) with a correlation of 0.48. The age of initiating smoking was similar to the age of initiating drug injection. Smoking was initiated before drug injecting by 82.9% of women who have both smoked cigarettes and injected drugs. Hence these data indicate that smoking is generally a precursor to drug injection.

| Table 7: Descriptive statistics for age at first drug injection, and number of years as injecting drug user. |
|----------------------------------|---------------|--------------|---------------|----------------|----------------|
| Age at first injection           | Median        | Minimum      | Maximum       | 25<sup>th</sup> percentile | 75<sup>th</sup> percentile |
|                                 | 16            | 7            | 44            | 14             | 21             |
| Years of injecting drug use      | 8             | 0            | 27            | 4              | 13.5           |

Virtually all of the women who reported injecting drugs (97.9%) reported initiating their drug injecting habits in the community, with one reporting her first injection in juvenile detention and another reporting her first injection to have occurred in an adult correctional centre. Amphetamines are commonly the drug of initiation into injecting, and those who have only ever injected amphetamines are believed to be in the early stages of drug use. These injecting habits may then progress to involve a variety of drugs beyond amphetamines alone. Only 16.5% of the drug injectors in this group reported injection of amphetamines alone.
11.2% of injectors had their last injection within the last four weeks, while 37.9% had injected more than one month and up to six months ago. 18.1% had their last injection more than six months ago and up to one year ago, and 32.8% had last injected more than one year ago.

28.8% of injecting drug users reported drug injection in prison at some time (n=34), a proportion slightly lower than for New South Wales at 32%. These women who have injected in prison represented 16.0% of all female inmates in Queensland. 17.8% of injecting drug users (n=21) reported that their last injection was in prison, however only six of these women reported having injected within the last month. It has been hypothesised that heroin is more readily available in prison than alcohol and cannabis, however only three women reported having used heroin in prison as a substitute for the lack of alcohol or cannabis.

The risk of disease transmission is great when injecting equipment is shared and such practices are also common amongst these women. Over 63% of drug injectors had shared needles in the past (n=75), with 39.8% having shared needles in the community only, 5.9% shared needles in prison only, and 17.8% having shared needles both in prison and in the community. Those who had shared needles in prison (n=28) represented 82.4% of women who had injected drugs in prison.

The following analyses refer specifically to the sub-group of thirty-four women who reported having injected in prison.

Needle sharing amongst this group is a common practice. The last time they injected drugs, 35.3% re-used the needle once after someone else had used it, while 35.3% re-used the needle more than once after someone else had used it. Only 26.5% did not re-use the needle after anyone else, while one person did not respond to the question. Thus 61.8% of prison injectors used a needle that had been used by someone else the last time they shot up. 38.2% used a needle that had already been used by two or more people the last time they shot up. In the majority of cases the shared injecting equipment also included the spoon, water, filter, and the drug, ranging from 55.9% to 70.6% of women sharing that item the last time they shot up. The solution or mix was also shared by 44.1%. All of these items yield a risk of disease transmission when shared. Tourniquets were not commonly shared (26.5%).

Only three women used a clean (sterile, new) needle last time they shot up in prison, and twenty-nine reported that the needle was cleaned before they used it. This indicates that these women were making some attempt to minimise the risks associated with needle sharing, however the sterilisation techniques used would have varied and effects would have been negligible in eliminating risk of disease transmission. 38.2% of prison injectors have bought a new needle in prison and 41.2% have tried to get bleach in prison to clean fits and injecting equipment. 64.3% of these found it easy or very easy to obtain bleach in prison, 28.6% found it difficult, and 7.1% reported that liquid bleach was unavailable in prison. Having bought a clean needle in prison was associated with having tried to get...
bleach in prison (p<0.01) indicating that these actions were associated with a seemingly real desire to avoid the risks associated with sharing injecting equipment.

61.7% of injecting drug users reported using new, sterile needles all of the time in the month prior to incarceration, while 16.5% used new needles most of the time, 5.2% used them some of the time, and 16.5% reported never using new needles in the month prior to imprisonment. The use of new needles was slightly higher for women who reported having injected in prison, with 67.6% using new needles all of the time and only 8.8% reporting never having used new needles in the months prior to imprisonment. Similarly, the frequency of obtaining needles and syringes from a needle exchange program or chemist was slightly higher amongst prison injectors than for injectors overall. This may however reflect that prison injectors may inject more frequently than injectors who have not injected in prison, so would require a new fit more often. Overall, 20.3% of injectors never obtained needles and syringes from a needle exchange or chemist in the month before coming to prison, while only 11.8% of prison injectors never used such services for new needles and syringes in that time.

Hepatitis C is common amongst injecting drug users, and is most often transmitted through the sharing of needles and injecting equipment. The prevalence of hepatitis C was over 15-20% higher for injecting drug users than for the overall sample, as demonstrated in figure 15 (self-report vs. antibody positive serology). The association between hepatitis C and injecting drug use was highly significant (p<0.01) as was the association between hepatitis C and needle sharing (p<0.01). 73.0% of injecting drug users were hepatitis C antibody positive, and 88.0% of injecting drug users who had ever shared a needle were hepatitis C antibody positive. Injecting drug users who had been injecting for less than three years had a significantly lower prevalence of hepatitis C than those injecting for three years or more (p<0.01). 32.2% of injecting drug users demonstrated poor knowledge of routes of infection for hepatitis C, while 43.2% and 24.6% respectively demonstrated reasonable and good knowledge levels regarding hepatitis C transmission. There was no association between positive hepatitis C serology and knowledge of its transmission. In addition to needle sharing, the use of non-sterile equipment for tattooing and body piercing is a means of transmission of hepatitis C. 50.3% of women with a tattoo were hepatitis C antibody positive, compared with 31.6% of women with no tattoos. Similarly, 56.9% of women with more than four piercings were hepatitis C antibody positive, compared to 38.5% of women with 4 or fewer piercings.
All women participating in the survey were asked how easy it was to get drugs in prison. 24.5% either did not know or did not answer the question, 15.1% thought it very easy and 21.2% quite easy to get drugs in prison. 19.8% thought it was quite difficult, and 19.3% thought it was very difficult to get drugs in prison. At the time of committing the crime for their current sentence, only 42% of female prisoners were sober, with 52.8% reportedly under the influence of either alcohol, other drugs or both. The proportion of women who were sober when they committed their current offence was lower in New South Wales, where only 31% of the sample was not under the influence of drugs or alcohol. Consequently, 52.8% felt that their current sentence was linked to drugs or alcohol. This result reflects the trend that female offenders are involved in high proportions of drug-related crime in order to finance their own drug addiction.

**Drug Treatment**

Of the 100 women who have used opiates, 40% reported having been on a methadone program in the past and 14% reported that they were currently on methadone while in prison. A greater proportion of prisoners in New South Wales were receiving methadone (32%) due to the higher prevalence of opiate use for that sample. Within the group of women receiving methadone in Queensland prisons, 39.9% were on a methadone program immediately before going into prison. These women were on methadone doses ranging from 25 to 120mg/day with a median of 57.5mg/day. Eleven of the fourteen women currently on methadone in prison believe that they are receiving the correct dose, while 3 believe that their dose is incorrect. Fifty-eight injecting drug users not receiving methadone in prison felt that they should be on the prison methadone program. Policy upheld in Queensland prisons precludes new patients being admitted to methadone programs in prison except in extenuating circumstances, such as pregnancy, however, those on a community program are able to continue with methadone treatment in prison. On discharge, methadone users are referred to a community service for continuation of their treatment. Alternative treatments for opiate addiction include buprenorphine and naltrexone. 14% and 12% of injecting drug users in this sample used these drugs respectively either currently or in the past.
Help or treatment for a drug or alcohol problem had been sought by 37.3% of the sample of women prisoners in Queensland, compared to 48% of the New South Wales sample. The most common sources of help for these women were detoxification centres, rehabilitation clinics, psychologists/psychiatrists and counsellors, and general practitioners. 92.4% of women who sought help did so prior to imprisonment. 27.8% of the sample felt that they required help with quitting drugs and/or alcohol, and the most commonly cited help needed included counselling, rehabilitation, support, and either Alcoholics Anonymous or Narcotics Anonymous.

Previous occurrence of overdose or unconsciousness due to drug taking was reported by 33% of the total sample of women prisoners. This occurred once only for 7.5%, 14.2% reported two to four episodes, and 9.4% of women prisoners reported five or more episodes of drug-related unconsciousness. The vast majority of these events took place in the community, with only five women reporting having been unconscious due to drug taking in prison. Three of these women received help from prison health staff and two of them were treated with Narcan.

Childhood physical abuse was associated with having used an illicit drug in the 12 months prior to imprisonment (p<0.01) and injecting drug use (p<0.01). Childhood sexual abuse was also associated with injecting drug use (p=0.05). For these associations, those who had experienced abuse were more likely to be involved in the drug-related activity specified.

The following paragraphs present the important associations between demographic variables and various drug-related variables. Regular use of any illicit drug in the twelve months prior to imprisonment decreased as age increased, and was less common for women who had completed post-secondary education. Women incarcerated in the south were more likely to have used a drug regularly in the year before prison, as were repeat offenders, remand prisoners, and those who had been unemployed or receiving a pension prior to imprisonment. Women incarcerated for property offences were much more likely to have used drugs regularly in the year before prison than those who had committed other offences, including drug-related offences. Those in prison for fraud offences were least likely to have used drugs regularly in the year before prison.

Regular use of cannabis in the year before prison was less common for women aged 35 years and older. Regular cannabis use was less prevalent for women who had been employed prior to imprisonment, and was more prevalent amongst those who had been unemployed prior to imprisonment, and those who were repeat offenders.

Women who had ever injected a drug were more likely to be young, with the likelihood of having ever injected decreasing as age increased. A similar pattern existed for needle sharing, whereby, of those who had injected, the likelihood of having shared a needle decreased as age increased. The age of first injection was lower amongst younger women, indicating that women are now increasingly likely to inject at an earlier age. Of Indigenous women in northern Queensland,
only 3.4% had a history of drug injection, compared with 62-65% for southern Indigenous women and non-Indigenous women in either region. Women who were receiving a pension before prison were more likely to have injected, however the age of first injection was likely to be higher for this group. Those who were employed before prison were less likely to have injected, and the injectors within this group were older at first injection. Injectors who had been unemployed or completing home duties prior to imprisonment were more likely to have begun injecting at an earlier age. The age of first injection increased as the level of education increased. Women in prison for fraud and violent offences were less likely to have injected than those in prison for other types of offence, however half of the injectors in prison for violence had their first injection aged 14 or younger. Drug-related offences were associated with a higher age of first injection, with 47.8% of injectors in this group first injecting at 20 or older. Repeat offenders were twice as likely as first-time prisoners to have injected, and remand prisoners were one-and-a-half times more likely than sentenced prisoners to have injected.

The demographic associations for ever having used opiates, principally heroin, were very similar to those for injecting, as were the associations for ever having used amphetamines. Indigenous women incarcerated in the north and older women were less likely to have used opiates or amphetamines, as were those who were employed prior to imprisonment and those who were in prison for fraud or violent offences. Previous opiate or amphetamine use was more likely for repeat offenders. Amphetamine use was more common among remand prisoners, and those in prison for property offences were more likely to have used opiates. Regular use of opiates in the year before imprisonment was associated with age, with younger prisoners more likely to have used regularly in that period. No other significant associations were identified for regular opiate use in the year before imprisonment, and no associations were found with any demographic variables for regular amphetamine use in the year before imprisonment.

The proportion of women who had injected a drug in prison was five times higher in the south of the state than the north. Prison injectors were more likely to be 25-39 years old, repeat offenders and be in prison for property offences. The prevalence of injecting in prison increased as the total time spent in prison increased. Those who had injected amphetamines and opiates in prison were more likely to have spent more than two years and more than five years in prison, respectively.

Indigenous women were less likely than non-Indigenous women to have sought help for a drug or alcohol problem. Repeat offenders and those in prison for drug or property offences were more likely to have sought help for a drug or alcohol problem. Of the women who had used opiates, non-Indigenous women and those who were in prison for fraud were more likely to have been on a treatment program of methadone, buprenorphine or naltrexone at some time. Opiate users in prison for violent offences were less likely to have received such treatment.
TATTOOING AND BODY PIERCING

Tattoos were very popular amongst women in this sample, with 71.7% reporting having at least one tattoo (n=152). Of these women, 73.0% had 1-4 tattoos, 21.1% had 5-10 tattoos, seven women had 11-20 tattoos and two women reported having more than twenty tattoos.

The majority (82.2%) had their tattoos done outside of prison, while 17.8% have had at least one tattoo done in prison. Most of the 125 women with tattoos done outside of prison had all of their tattoos done by a professional (58.2%), however 28.1% have non-professional tattoos and 13.7% have had tattoos done by professionals and non-professionals. Of those 61 women who had tattoos that were done outside of prison by a non-professional, 45 reported that the equipment was cleaned before use and 3 used new equipment, while 8 reported that the equipment was not always cleaned before use and 5 did not know if it was cleaned.

Of the 27 women with tattoos done in prison, 12 reported that the equipment was cleaned before use, and 9 used new equipment, while 3 reported that the equipment was not always cleaned before use, and 3 did not know if the equipment was cleaned.

Overall, 57 women reported use of equipment that had been cleaned prior to tattooing by non-professionals either in prison or in the community. 14 of these women specified how the equipment was cleaned. The following cleaning strategies were reported: heat sterilisation (n=4); boiling water (n=4); soaked in bleach (n=3); methylated spirits (n=2); and wiped (n=1).

Body piercing is a very popular practice amongst female prisoners. Overall, 92.9% of the sample had at least one piercing (n=196). Women with 1-4 piercings represented 57.8%, 29.9% had 5-10 piercings, and 5.2% had more than ten piercings. The most body piercings reported by an individual was 21. The most commonly pierced body part was the ear (91.9% of the sample), with navel (26.5%) and nose piercings (25.6%) also popular. Other frequently pierced body parts included the lip (n=19), tongue (n=16), nipple (n=15) and eyebrow (n=15), while four women reported having a genital piercing.

Of the 196 women with piercings, the majority had their piercings done outside of prison (81.1%). Twenty-eight women had at least one piercing done inside prison, and 9 women did not disclose where their piercings were done. Of those 28 women with prison piercings, 4 reported using new equipment and 19 reported that the equipment was cleaned before use, while 3 women reported that the equipment was not always cleaned before use, and 2 did not know if it had been cleaned. Of the 19 women who used cleaned equipment, the following cleaning techniques were used: boiling water (n=11); soaked in bleach (n=4); heat sterilisation (n=1); methylated spirits (n=1); cleaning solution/detergent (n=1); and wiped (n=1).
Overall, there were fourteen cases of either tattooing or piercing using equipment that was not cleaned prior to use, and nine cases where the individual was unaware of whether or not the equipment was cleaned prior to use. These women may have been infected with blood borne disease such as hepatitis C through these unsafe practices. There is also a degree of risk associated with the use of ineffective cleaning techniques. It is difficult to ascertain the proportion of women who were potentially exposed due to inadequate cleaning of equipment. With the exception of “wiping”, which is an inadequate means of protection from blood borne diseases, the techniques listed are not sufficiently detailed to ascertain effectiveness. Many women with tattoos done by non-professionals did not specify the cleaning technique used prior to tattooing.

Injecting drug use was significantly associated with having a tattoo, having used new equipment when getting tattoos, and having any body piercings. Women with tattoos were more likely to be antibody positive to hepatitis C.

The likelihood of having at least one tattoo increased as age increased, and decreased as the level of education increased. Women incarcerated for fraudulent offences were less likely than others to have a tattoo, while repeat offenders and women who had spent more than 5 years in prison were more likely to have a tattoo. Women with the lowest education level were more likely to have used new equipment for tattooing. The use of new equipment for tattooing was more likely amongst those incarcerated for drug-related offences and less likely for those incarcerated for violent offences. Indigenous women with tattoos who were incarcerated in northern Queensland were less likely than their southern or non-Indigenous counterparts to have used new equipment for tattooing. Similarly, these northern Indigenous women were less likely to have body piercings.
Gambling is frequently high amongst disadvantaged groups. Forty-seven women representing 22.2% of this sample reported gambling regularly, that is, more than three times per week, in the twelve months before coming to prison. These women gambled as little as $11 and up to $17 500 per week. The majority (74.5%) spent $100 or more on a weekly basis. Queensland women were more likely to gamble regularly and these regular gamblers spent more money on gambling than their New South Wales counterparts, where 16% of the sample gambled regularly, 44.5% of whom gambled $100 or more each week. The preferred modes of gambling for regular gamblers were poker machines, casino games and cards, however other modes cited included horse racing, lotteries or 'scratchies' and bingo. Crime was the most common source of gambling money for these women (n=19), closely followed by social security benefits (n=14) and work (n=10). Loans from family members and other unspecified lending sources were also used. A little over half (n=26) of regular gamblers felt that their gambling had caused them problems.

Regular gamblers who gambled more than $500 a week were more likely to have financed their gambling through crime than any other source of money. The amount gambled per week was not associated with whether or not they felt their gambling caused them problems, however as the weekly amount increased, the proportion who felt that gambling contributed to their current sentence increased (p=0.05).

Across the entire sample, poker machines were most popular, used at least once a week by 25.4% and less than weekly by 43.5% of the sample. Lotteries were used weekly by 24.4% and less than weekly by 33.5%. Other frequently used forms of gambling amongst this group of women were casinos, bingo and horses, dogs or other animals.

The largest amount of money ever gambled in one day varied greatly across the group. Only twenty-six women had never gambled, or had only ever gambled less than one dollar on a single day. Fifty-five women had gambled more than one and less than one hundred dollars and forty-four had gambled more than $100 and up to $1000 in a single day. Twenty-nine women had gambled more than $1000 and up to $10 000 and five had gambled more than $10 000 in one day.

Problematic gambling is often seen as being hereditary. 22.5% of this sample reported that either one or both parents gamble (or gambled) too much. Twenty-two women reported that when gambling, they would go back to win back money they had lost most or all of the time, while twenty-five women would have done that some of the time. Only twelve women felt that gambling contributed to their current imprisonment. Thirteen women would like help to give up gambling and only nine have sought help in the past for a gambling problem.
Regular gamblers were more likely than not to have used a drug regularly in the 12 months before imprisonment. This reinforces the notion of association between various risk taking behaviours.

Regular gambling was associated with numerous demographic variables. Gambling at a rate of three times or more a week was less common as age increased. Women incarcerated in the north were more likely to have been regular gamblers, as were repeat offenders. Those who were unemployed prior to imprisonment were more likely to have gambled regularly, while women who had been occupied with home duties were less likely to have been regular gamblers in the year before coming to prison. The likelihood that regular gamblers felt that their gambling had caused problems for them increased as the level of education increased. Similarly, women incarcerated in the south and those incarcerated for fraud or drug offences were more likely to report their regular gambling as problematic. Repeat offenders were less likely than first-time inmates to identify their regular gambling as the source of problems.

MENTAL HEALTH

Psychiatric History
Almost two thirds of women in prison reported having received treatment or assessment by a psychiatrist or doctor for an emotional or mental problem (n=129), representing 60.8% of the sample, while 50% of the New South Wales sample had received assessment or treatment. Almost all of those assessed or treated within the Queensland sample (n=121) were told that they had a particular condition. The New South Wales sample had fewer diagnoses than the Queensland sample, excluding drug and alcohol dependence (26% vs. 51.4%). In further contrast, the AIHW (2002) state that mental disorders affect 5.8% of the total Australian population. Depression, anxiety and substance dependence were the most common conditions amongst the Queensland group of women prisoners. Details of these self-reported emotional and mental illnesses of these women are presented in figure 17.

![Mental Illness](image)

**Figure 17:** Mental and emotional illnesses suffered by women prisoners in Queensland.
While the rate of treatment or assessment for an emotional or mental problem was comparable to that for New South Wales, the proportion of women who had been told by a doctor or psychiatrist that they had a particular condition was much lower in New South Wales than Queensland. Depression and anxiety were also the most common conditions in New South Wales, however the prevalence of previous diagnosis for each condition was lower than Queensland figures. The relative prevalence for specific conditions was as follows: depression, 38.7% vs. 15.9%; anxiety, 28.3% vs. 5.3%; manic depressive psychosis, 9.0% vs. 3.8%; personality disorder, 9.0% vs. 3.0%; and schizophrenia, 6.1% vs. 2.3%. It is important to note that the increased proportion of women diagnosed with these conditions in Queensland might simply reflect diagnosis rather than actual prevalence, hence there may be fewer undiagnosed cases in the Queensland sample than in the New South Wales sample. Amongst females in Australia, the overall prevalence of depression is 6.8% and of anxiety disorders is 12.1%, according to the AIHW (2002). Additionally, the overall prevalence of drug use disorders was 1.3% and of harmful or hazardous use of alcohol was 3.7%. These figures demonstrate that female prisoners have a very high prevalence of mental illness in comparison with the general population. It is important to note that the elevated prevalence of mental illness amongst the prison population may reflect prior illness rather than simply illness that has developed in association with imprisonment. Thirty-eight women who were not currently receiving psychiatric treatment believed that they should be receiving treatment in prison. The most commonly cited reasons for needing treatment were stress, depression and anger. Other reasons included drug or alcohol dependence, sexual abuse issues and anxiety.

According to medical chart review, 23% of women were using medication that would be prescribed for a psychiatric condition. Twenty percent were using antidepressants, and 6.6% were using antipsychotics. Four women were on methadone and one was on buprenorphine. Three women were taking benzodiazepines that may be prescribed for anxiety or insomnia. Of those women ever diagnosed with a psychiatric condition, 23% were taking some form of related medication. 18.3% of women diagnosed with depression in the past were taking antidepressants. None of the women who had been previously diagnosed with anxiety were taking benzodiazepines. One woman who had been diagnosed with a psychotic disorder was taking antipsychotic medication. Four women who had been diagnosed with a substance disorder were taking medications for that disorder at the time of the survey.

Forty-seven women had been admitted to a psychiatric unit or a hospital for treatment of a psychiatric problem. For the majority, these admissions occurred in the community (n=36), however three women were admitted from prison and six were admitted both in the community and in prison. Four women did not disclose where the admissions occurred. The proportion of those women who had received assessment or treatment and had ever been admitted was comparable at 36% for both the New South Wales and Queensland samples.

An indicator was generated of the degree to which the illness was controlled by combining the number of admissions and the duration of the longest admission for each individual. Ten of the women indicated that their illness was well
controlled, eighteen women had illnesses that were moderately controlled, and fourteen women had illnesses that were poorly controlled. The remaining five women failed to provide the necessary information. The degree of control would be influenced not only by the quality of care, but numerous other factors including continuity of care, degree of patient compliance and the amenability of their particular condition to medical intervention.

As previously discussed, depression was the most commonly diagnosed psychiatric illness amongst this study sample. In addition to the clinical diagnosis of depression, information regarding states of depression was obtained using the Beck Depression Inventory. The Beck scoring profile for the sample is presented in table 8. Only one fifth of the sample fell into the normal category, with more women in the moderate to severe depression group than the normal group. Overall, 68.8% demonstrated symptoms of at least mild depression, compared to 48% for New South Wales.

<table>
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<th>NSW Percentage</th>
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Having been diagnosed with a psychiatric condition was associated with injecting drug use. 62.8% of those with a psychiatric diagnosis were injecting drug users. Injecting drug users were also more likely to have been diagnosed with depression than women who do not inject drugs. Scores using the Beck Depression Inventory did not support this result, however this may be due to the high prevalence of depression found using the Inventory, such that the power was too low to establish a significant association. Women who had been diagnosed with a psychiatric condition were more likely to have suicidal thoughts and to harm themselves. Analysis using scores from the Beck Depression Inventory formed the same significant associations as for psychiatric diagnosis, that is, women scoring as depressed were more likely to consider suicide and to harm themselves. Women reporting a diagnosis of a mental health problem were more likely to have been sexually abused as a child (p=0.06). A similar association occurred for psychiatric diagnosis and injecting drug use (p=0.02), whereby women who had been diagnosed with a mental health problem were more likely to be injecting drug users. These mentally ill women were also more likely to have received an injury from childhood physical abuse (p=0.03).

Demographic variables formed numerous associations with mental health variables and are discussed in the following paragraph. The prevalence of
diagnosis of a specific mental health problem was elevated amongst women aged from 25-39 years, and amongst women incarcerated in southern Queensland. Depression, the most prevalent condition diagnosed, had no significant associations with any demographic variables. This lack of association held for both self-reported diagnosis of depression and scores using the Beck Depression Inventory, indicating that depression affects women of all sub-groups within the study sample. Anxiety was more prevalent among repeat offenders, and was less prevalent for Indigenous women and those who were unemployed prior to imprisonment. Substance dependence, including both drug and alcohol dependence, decreased as age increased. Lower rates of substance abuse were associated with fraud and violent offences. Substance abuse was three times higher in repeat offenders than first-time prisoners, and remand prisoners were also more likely to have been diagnosed with substance abuse.

Suicide
While suicide is often associated with mental illness, there is not always a corresponding illness associated with suicide or suicidal thoughts. Half of the sample (n=104) reported having thought about committing suicide. Sixty-seven of these women have attempted suicide at some time. The proportions of women having thought about suicide and attempted suicide were comparable but slightly lower than for New South Wales (49% vs. 54% and 31.6% vs. 39%, respectively). In the Queensland sample thirty-two had made only one attempt, twenty-four had made two to five attempts, and ten had attempted suicide more than five times in their life. One person did not disclose the number of attempts. The most commonly used means of attempting suicide were overdose with tablets (n=33), slashing (the wrists) or stabbing (n=31), hanging (n=22) and overdose by injection (n=16). Other methods included motor vehicle, drowning, poisoning, and gassing. The majority of these women made their suicide attempts in the community (n=45), while 10 attempted suicide in prison and eleven reported suicide attempts both in the community and in prison.

Of the larger group who reported having experienced thoughts of suicide, over half had not had suicidal thoughts within the last year (n=54), thirty-one had suicidal thoughts between one month and twelve months ago, and only seventeen women had suicidal thoughts within the previous month. Those who had thought of suicide within the previous year were asked how often these thoughts occurred. Twenty-two women had suicidal thoughts at least monthly, while twenty-four had these thoughts less than monthly and four women did not answer. Overall, forty-three women felt that their thoughts of suicide had decreased since coming to prison, and twenty women felt that the frequency of their suicidal thoughts had remained the same. Only fifteen women had experienced increased thoughts of suicide since going to prison, and twenty-six either did not know or did not answer.

Indigenous women were more likely to have thought about committing suicide, but the proportions of Indigenous and non-Indigenous women who had attempted suicide were comparable. Sentenced prisoners were more likely to have had suicidal thoughts, however remand prisoners were more likely to have actually attempted suicide. Women who were employed prior to imprisonment were less likely to have attempted suicide than those of other employment status.
Self Harm
This data did not reveal an association between self harm and having thoughts of suicide, however, there was a significant association between having attempted suicide and having committed self harm (p=0.00). Thirteen women were excluded from this survey because they were considered by custodial staff to be either psychologically or emotionally unstable, with potential for harm either to themselves or to interviewers. Therefore, the reported prevalence of self harm is likely to be an under-representation of the true prevalence for the female prison population.

Forty-three women (21.3%) in this sample reported having harmed themselves. This is similar to the New South Wales proportion of 23%. Seventeen of them have only done this once, while thirteen have harmed themselves between two and five times and fourteen women reported harming themselves very often. One woman did not disclose the number of episodes of self harm she had experienced. While the prevalence of self harm history was comparable between New South Wales and Queensland, women in the Queensland sample were more likely to have harmed themselves repeatedly. 57% of self harmers in New South Wales had harmed themselves only once, compared to 39.5% of self harmers in Queensland. Slashing (the wrists) or stabbing was most commonly undertaken (n=33), however many other methods were used by three or fewer people each. These methods included strangulation, burning, overdose, poisoning and striking themselves with an object.

Self harm has occurred both in prison and in the community for these women, with twenty-five acting in the community and eighteen acting in prison. Two women did not answer. The major reason for committing self harm was to relieve tension (n=18). Other reasons were also cited, such as to get help, to make others listen to them, to deal with personal problems or drug withdrawal, depression or dealing with the stresses of moving gaoels. Only two women were unsure or had no reason as to why they had harmed themselves. Most of these women had last harmed themselves more than a year ago (n=26), nine had self harmed between one and twelve months ago, and only eight had harmed themselves within the last month.

Over half of the women who self harm (n=28) do so on impulse, and 80% (n=30) do so without speaking to anyone about it first. Nine women reported speaking to someone about their feelings before self harming and six of these women cited their confidants as another inmate, a family member, a friend, a nurse or a psychologist. Women who did not confide prior to self harm cited various reasons, the most common being not wanting to confide, having no one to talk to, they were drunk at the time, and that it was private and no one else’s business. Others felt: that if they were serious about it they would not talk to anyone else first: their confidant might think they were mad: there was no point as their confidant would not listen, or that they would be put in a safe cell. A few women cited a combination of reasons for non-disclosure, while others had no reason and did not know why they did not discuss their feelings with someone else prior to self harm.
Self harm decreased as age increased, and was three times lower for women 35 years and older than for their younger counterparts. Indigenous women were more likely to have committed self harm than non-Indigenous women (40.3% vs. 15.0%), but non-Indigenous women in the north were more likely than their southern counterparts to commit self harm (23.1% vs. 13.5%). Self harm was also associated with type of offence, with an increased prevalence for violent offences and a decreased prevalence for fraud offences.

REPRODUCTIVE HEALTH

Fertility
Female Queensland prisoners reported numbers of previous pregnancies between none and 13, with three quarters having had four or fewer, and 18% having had none. This compares to 24% of nulliparous female prisoners in the New South Wales survey. Seven women surveyed were known to be pregnant at the time of interview and a further four were uncertain as to their pregnancy status. Of those recalling their most recent pregnancy (n=153), 35.8% had been pregnant within the last 5 years, while 24% were last pregnant more than 15 years ago.

Of the 173 participants (82%) who had ever been pregnant, 158 responded to a question regarding the planning of their pregnancies. Ninety-six women (45.3% of participants) had not planned any of their pregnancies. This was true for a greater proportion of repeat offenders than first time offenders. 63.7% of women reported at least one unplanned pregnancy. Older women were more likely to have had an unplanned pregnancy than younger women, and those who had been physically or sexually abused as a child were more likely to have had an unplanned pregnancy than those who had not.

Forty percent of those surveyed reported at least one miscarriage, with 8% having three or more. Comparatively, 37.1% of the New South Wales sample had experienced a previous miscarriage. The median age at first miscarriage in Queensland was 20 years (Inter-quartile Range (IQR) 17-25), and the median age at last miscarriage was 26.5 years (IQR 22-32).

28.8% of participants reported at least one termination of pregnancy in the past, with 13.2% reporting two or more. New South Wales data showed 32.6% of women to have had a previous termination. The median age at first abortion for Queensland prisoners was 19 years (IQR 16-24) and at last abortion was 25 years (IQR 21-30). Women aged 25-39 were more likely to have had at least one abortion than women in other age groups. Compared to those convicted of other offences, drug offenders were also a group more likely to have had an abortion. Of the 61 women who had ever had an abortion, 43 (70.5%) were sexually active before the age of 16. As expected, those women who had had at least one unplanned pregnancy were more likely to have ever had an abortion.

The majority of women surveyed (71.7%) had given birth to at least one child. 22.6% had given birth to 4 or more children. Women had a median age at the birth of their first child of 18 years (IQR 16-21). While the median age at the birth of their most recent child was 26 years (IQR 23-32). Thirty-five women
reported difficulty conceiving in the past. Of these, 20 (57.1%) reported trying to get pregnant for greater than 12 consecutive months.

Review of the medical charts of participants revealed twenty-one women to be taking female hormonal medication. These were of the type typically prescribed for contraception in 14 cases, and of the type typically prescribed for perimenopausal symptoms (hormone replacement therapy) in the remaining 7 cases. The individual’s reasons for taking these medications were beyond the scope of the survey, and because there are several indications for these groups of drugs (for example, oral contraceptives may be prescribed primarily for acne treatment), no inference could be made in this respect.

Preventive Health Measures
Thirty-three percent of women reported having a ‘well-woman’ or ‘gynaecological’ check-up during their imprisonment at their current location. Participants were asked specifically about their screening behaviour with regards to breast self-examination, mammography and cervical cytology. 64.6% of those surveyed reported examining their breasts at some point in the past and 34.9% undertook this practice at least monthly. This compares to 56% and 20.5% of female New South Wales prisoners respectively.

In contrast, only 23.1% of participants had ever had a mammogram. This is likely to reflect the age distribution. Only eleven participants were aged 50 years or over. Of these eleven women, six had ever had a mammogram and only three had had one within the last two years. One of these was because of symptoms. Four of the eleven women over age 50 reported ever having had a screening mammogram in the past.

Of all those reporting previous mammography, 54.3% had undergone this procedure within the last 2 years. The same proportion reported the presence of symptoms to be the reason for the procedure. However, there was no association between the reason for and the recency of mammography. Overall, 9.9% reported participation in mammography for screening purposes.

90.6% of the women surveyed reported having a Pap smear at some time in the past. These women were asked to recall their most recent smear. The result of this smear was reported as abnormal by 8.9%, while 12% did not know the result of their last smear. 65.6% of participants reported having a Pap smear within the last 2 years. Similarly, population figures for Australian women aged 20-69 indicate that 64.8% have had a Pap smear within the recommended screening time interval (AIHW, 2002). Fewer women prisoners (59%) reported regular attendance for Pap smears at least once every two years. This was not associated with either current age or age at first intercourse, but did increase as the highest level of education attained increased. In addition, repeat offenders were less likely to attend for regular Pap smears than first time offenders.

A prison medical chart review for all participants retrieved Pap smear results for only 32.1%. Of these, 17.9% had abnormal results.
The New South Wales survey reported 84.1% of their female sample had undergone a previous Pap smear. Self-reported results of their most recent smear indicated abnormalities in 24%. In addition, the study offered smears to all female participants. Fifty-one percent of women either consented to have a smear performed or had results available from a smear taken within the previous 12 months. Forty percent of these were abnormal.

When asked about the frequency of condom use in the 12 months prior to imprisonment, 14.6% of women surveyed reported using condoms all the time, and 67% never used condoms. Of occasional or never users, 25.5% gave individual behavioural or preference reasons, 39.6% had regular partners or were trying to conceive, and 12.7% reported no partner, female partners only or negative testing for themselves and their partner as the reason. The type and extent of ‘testing’ reported by this last group of women was not explored further in the survey.

**SEXUAL HISTORY**

Of the women surveyed, 72.6% (n=154) first had sexual intercourse before 16 years of age. For 63.0% of these women, this was consensual sex. The other 37.0% were raped. A total of 56.6% (n=120) of participants reported they first had consensual sexual intercourse prior to age 16. National figures from 1997 indicate only 21% of females have had sexual intercourse by 16 years of age (Moon, Meyer and Grau, 1999). The proportion of women who experienced consensual intercourse before the age of 16 was inversely related to both the current age of the women and their education level. The age of participant’s partners at first consensual intercourse tended to be slightly older than themselves with a median age difference of 2 years. The inter-quartile range for age difference was 1 to 4 years.

The majority of women (76.9%) were heterosexual, with 16.0% identifying themselves as bisexual and 3.8% identifying themselves as homosexual. 3.3% of women did not respond to the question. This contrasts with the New South Wales female prison population, where 60.6% were heterosexual and 12.9% were homosexual. In Queensland, 22.6% reported having both female and male partners in their lifetime, and only 1.4% reported exclusively women partners. 33% had fewer than 6 sexual partners in their lifetime, while 25.5% had more than 15 partners, including 33 women who identified themselves as sex workers.

Of the 33 women who identified themselves as sex workers at some stage in their lives, 54.8% (n=17) had worked in the sex industry for longer than 1 year. The most common type of sex work reported was “private” (n=21), followed by “brothel” (n=16), “street work” (n=15), and “escort agency” (n=14). Women convicted of drug or property offences were more likely to have ever worked as a sex worker than those convicted of other offences.

Before entering prison, 70.8% of those surveyed were in a stable relationship. The majority (73.3%) of those were still in contact with that person and expected to resume the relationship (56%) upon release. Most women (61.8%) also
believed overnight private visits from partners should be allowed. However, only one participant reported having intercourse with her partner in prison.

Thirty women (14.2%) reported having sex with another prisoner. In all of these cases, it was consensual sex. A similar rate was recorded in New South Wales.

**Sexually transmitted infections**

Table 9 shows the number of women and the percentage of all women surveyed who reported ever being diagnosed with a sexually transmitted infection. The cells of the table are not mutually exclusive.

<table>
<thead>
<tr>
<th>STI</th>
<th>Number of women</th>
<th>Qld percentage</th>
<th>NSW percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chlamydia*</td>
<td>29</td>
<td>13.7</td>
<td>11.8</td>
</tr>
<tr>
<td>Syphilis*</td>
<td>10</td>
<td>4.7</td>
<td>7.1</td>
</tr>
<tr>
<td>Gonorrhoea*</td>
<td>10</td>
<td>4.7</td>
<td>8.3</td>
</tr>
<tr>
<td>Donovonosis*</td>
<td>1</td>
<td>0.5</td>
<td></td>
</tr>
<tr>
<td>Hepatitis B*</td>
<td>9</td>
<td>4.2</td>
<td>19.7</td>
</tr>
<tr>
<td>HIV*</td>
<td>1</td>
<td>0.5</td>
<td>1.5</td>
</tr>
<tr>
<td>Thrush</td>
<td>96</td>
<td>45.3</td>
<td></td>
</tr>
<tr>
<td>Oral herpes</td>
<td>55</td>
<td>25.9</td>
<td></td>
</tr>
<tr>
<td>Pubic Lice</td>
<td>18</td>
<td>8.5</td>
<td>15.4</td>
</tr>
<tr>
<td>Urethritis</td>
<td>16</td>
<td>7.5</td>
<td>14.2</td>
</tr>
<tr>
<td>PID</td>
<td>13</td>
<td>6.1</td>
<td></td>
</tr>
<tr>
<td>Genital Warts</td>
<td>12</td>
<td>5.7</td>
<td>14.2</td>
</tr>
<tr>
<td>Genital herpes</td>
<td>7</td>
<td>3.3</td>
<td>4.7</td>
</tr>
<tr>
<td>Cervical HPV</td>
<td>1</td>
<td>0.5</td>
<td></td>
</tr>
</tbody>
</table>

* Notifiable disease
  - HIV human immunodeficiency virus,
  - PID pelvic inflammatory disease
  - HPV human papilloma virus

**Note:** Empty cells indicate that information was unavailable

These rates are likely to be underestimates as a result of reliance on self-report. Compared to corresponding data collected in New South Wales, female Queensland prisoners reported the following infections less frequently than female prisoners in New South Wales: hepatitis B (4.2% vs. 19.7%), genital warts (5.7% vs. 14.2%), pubic lice (8.5% vs. 15.4%), and non-specific urethritis (7.5% vs. 14.2%). As seen in Table 9 above, the most prevalent of the notifiable diseases was chlamydia with almost 14% of women having had this infection in the past. Among self-reported sex workers, past chlamydia infections were 2.78 times more likely than among other participants.
The medical charts of all participants were reviewed for evidence of screening for syphilis, chlamydia, gonorrhoea, hepatitis B and HIV. The results are presented in Table 10.

<table>
<thead>
<tr>
<th>STI</th>
<th>Percentage Screened</th>
<th>Number positive</th>
<th>Percentage positive (of those screened)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hepatitis B</td>
<td>96.2</td>
<td>26</td>
<td>12.3</td>
</tr>
<tr>
<td>Syphilis</td>
<td>94.3</td>
<td>9</td>
<td>4.5</td>
</tr>
<tr>
<td>Chlamydia</td>
<td>77.8</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Gonorrhoea</td>
<td>78.3</td>
<td>2</td>
<td>1.2</td>
</tr>
<tr>
<td>HIV</td>
<td>84.0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

As seen in Table 10, the most prevalent positive result on previous pathological testing was Hepatitis B. It should be noted that 14 of those testing positive to hepatitis B were known to have been vaccinated and the distinction between a positive antibody test and a positive antigen test was methodologically blurred. New South Wales data indicated that one person was hepatitis B surface-antigen positive (currently infectious) among their female sample, but 41.7% tested positive to hepatitis B core-antibody (previous exposure).

Table 10 also indicates high proportions of prisoners have been screened at some stage during imprisonment for each of these notifiable diseases. Screening for Hepatitis B and syphilis was most common. With the exception of syphilis and HIV, the correlation between self-reported previous occurrence and a recorded positive screening test result is poor. A variety of factors may have influenced the hepatitis B results as discussed above, and the treatability and therefore transient nature of both chlamydia and gonorrhoea would result in fewer positive screening results than reported prior cases for those diseases.

**SEXUAL ABUSE**

Women were asked about incidents of sexual abuse prior to the age of 16 years. Of those surveyed, 79 (37.3%) felt subject to some form of sexual abuse during this time. However, ninety women (42.5% of those surveyed) reported some form of non-consensual sexual activity upon further questioning. An additional nine women acknowledged having been abused but refused to disclose anything further. Questioning about the nature of sexual abuse included a variety of specific acts and two more general categories. The latter were unwanted sexual arousal and unwanted sexual activities. Subjugation to unwanted sexual arousal was reported by 21.7% of participants, and 26.4% were forced into unwanted sexual activities at least once before 16 years of age. In 62.5% (n=35) of these latter cases, the abuse occurred before the age of 10. Family members were the main perpetrators of this abuse, consisting of 60.7% (n=34) of those forcing unwanted sexual activities.
The specific acts of abuse were ranked from least to most severe in the following way: visual acts such as perpetrator genital exposure and witnessing perpetrator masturbation, tactile acts performed by or on the perpetrator, oral acts performed by or on the perpetrator, and attempted or completed intercourse. Table 11 shows the relationship between sexual abuse ranked in this way, the age at which the most severe form of abuse occurred and the perpetrator of this most severe form of abuse.

<table>
<thead>
<tr>
<th></th>
<th>Actual or attempted intercourse once only (%)</th>
<th>Actual or attempted intercourse more than once (%)</th>
<th>Abuse, not intercourse related</th>
<th>Total (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Under 10</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Father</td>
<td>0</td>
<td>14</td>
<td>0</td>
<td>14 (15.5%)</td>
</tr>
<tr>
<td>Other Family</td>
<td>5</td>
<td>13</td>
<td>6</td>
<td>24 (26.7%)</td>
</tr>
<tr>
<td>Other</td>
<td>3</td>
<td>5</td>
<td>4</td>
<td>12 (13.3%)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>8 (8.9%)</td>
<td>32 (35.6%)</td>
<td>10 (11.1%)</td>
<td>50 (55.6%)</td>
</tr>
<tr>
<td><strong>10 and over</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Father</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>3 (3.3%)</td>
</tr>
<tr>
<td>Other Family</td>
<td>4</td>
<td>4</td>
<td>1</td>
<td>9 (10%)</td>
</tr>
<tr>
<td>Other</td>
<td>6</td>
<td>9</td>
<td>13</td>
<td>28 (31.1%)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>10 (11.1%)</strong></td>
<td><strong>16 (17.8%)</strong></td>
<td><strong>14 (15.6%)</strong></td>
<td><strong>40 (44.4%)</strong></td>
</tr>
</tbody>
</table>

As seen in Table 11, over a third of abused women were subject to multiple episodes of attempted or completed intercourse before the age of 10 years. For most of these episodes, the perpetrator was a family member, predominantly a father figure. In the older age group, the perpetrators were more often people other than the relatives of the victims. Victims of abuse with an Indigenous background were more likely to be in the older age group at the time of the onset of abuse compared to victims with a non-Indigenous background. Overall, 73.3% of abused women, and 31.1% of all female prisoners, were victims of unwanted attempted or completed intercourse before the age of 16 years and a further nine did not disclose the nature and extent of their abuse. A similar result was found in the New South Wales survey, with 35.6% of women reporting attempted or completed intercourse before 16 years of age.

Among the ninety women who had been sexually abused, the abuse continued for more than five years in 36.7% (n=33). For 14.4% (n=13), it occurred once only, for 14.4% (n=13) it occurred for six months or less, and for 28.9% (n=26) it occurred for between six months and five years. Five women did not respond to the question about the duration of sexual abuse.
At the time of the abuse, half of the women blamed themselves for its occurrence and 72.2% felt they did not fit in with their peer group. 75.5% of the women found it hard to trust others, and only 26.7% could count on others for support at the time of the abuse. For those who felt supported (n=24), relatives, including parents (n=9), siblings (n=5) and others (n=4), were the main providers of that support.

Twenty-nine (32.2%) of the abused women talked to someone about the abuse around the time of its occurrence. Twenty-six women spoke to a member of their family or a friend, with eight of these women also confiding in another person such as a health professional. Two women chose to speak only to a teacher and one woman spoke only to a psychologist. Of those who confided in someone at the time of the abuse, twelve (42.9%) found at least one person somewhat helpful. Women who were victims of attempted or completed intercourse tended to be less likely to tell someone of the abuse at the time compared to women who were not abused in this way (29.7% vs. 41.7%). Queensland women were more likely to have talked to someone about the abuse around the time of its occurrence than New South Wales women (32.2% vs. 17%).

In the time since the occurrence of abuse, 72.2% (n=65) of abused women had talked about it. Twenty-one women (23.3%) had spoken to a friend or family member alone, and seven (7.8%) had spoken to a professional such as a psychologist or social worker alone. A further 37 (41.1%) had spoken to more than one person in the time since the abuse, usually including a friend or family member (37.8%). 84.4% (n=54) of women who were victims of attempted or completed intercourse had confided in someone since the time of the abuse compared to 50% (n=11) of the women who were victims of other forms of abuse only. The vast majority of women who had chosen to confide in someone (83.1%) had found it helpful. Yet, at the time of the survey, twenty-eight women (31.1%) still felt somewhat or mainly responsible for the abuse, and 58.9% (n=53) of abused women continued to experience negative effects from the abuse experienced prior to age 16. In sixteen cases the perpetrator had admitted the abuse, and in only twelve cases did the woman feel the consequences for the abuser were sufficient.

Since the age of 16, 21.7% women reported instances of intercourse where the other person used their size or weight to immobilize them, 22.7% reported instances involving the threat of violence and 18.4% reported instances of intercourse that involved actual violence.

Seven women reported being sexually harassed by another prisoner. Of these, two described verbal harassment, two described pressure to have sex, one reported fondling and two preferred not to disclose the nature of the abuse.

These figures relating to the prevalence of sexual abuse both before and after the age of 16 in women prisoners contrast dramatically with the 8.8% of Queensland women aged 18 years or more who reported ever being the victims of rape or sexual assault in a representative population survey (Office of Women's Affairs, 1998).
PHYSICAL AND EMOTIONAL ABUSE

Of the women surveyed, 37.7% (n=80) reported being physically or emotionally abused by someone caring for them before the age of 16. In all but one case, the perpetrator was aged 18 years or older. Parents of either gender (in 58.8% of cases) were reported as the most common perpetrators. Other family members were responsible for 21.3% of cases and non-family members for 16.3% of cases. 3.6% of these women did not specify the perpetrator of the abuse. Most cases (65%) occurred or began before the age of 10, with 18.8% of victims reporting physical or emotional abuse occurred throughout their entire childhood.

When asked separately about physical abuse in childhood, 37.7% (n=80) of participants reported this occurrence. A further ten reported injuries resulting from violent acts such as kicking, punching and being hit with objects. Of these ninety women (42.5% of participants), 28.9% (n=26) sustained injuries requiring medical attention, 28.9% sustained injuries not requiring medical attention and 41.1% (n=37) did not report any injuries related to violence in childhood. Women who had been physically abused in childhood were less likely to have been convicted of violent crimes, and were less likely to be Indigenous. In 70% of cases, the perpetrators were reported to be the parents of the victim. 27.8% of victims reported that the instances of abuse occurred more than once a week, while a further 40% reported instances occurred most weeks. For the majority of victims (67.8%), the abuse continued for more than 5 years.

45.3% of participants reported witnessing some form of domestic violence or abuse in their childhood. In 24% (n=23) of cases this occurred more than once a week. Overall, 23.1% of participants reported witnessing violence resulting in injuries requiring medical attention, 22.2% reported witnessing ‘severe assault’, and 3.3% (n=7) reported witnessing death due to violence by others. A total of 62.3% of participants reported witnessing yelling, pushing or hitting in their childhood home.

Domestic violence in the childhood home was positively associated with both physical and sexual abuse in childhood. Women who had witnessed domestic violence were 1.83 times more likely to report either physical or sexual abuse, or both, compared to those who had not.

In adulthood, 61.8% (n=131) of the participants reported at least one violent relationship. This was substantially less than the New South Wales survey, where 81.8% reported at least one violent relationship. A Queensland population survey however (Office of Women’s Affairs, 1998), reported that only 13.6% of women aged 18 years or older self-reported that they had been victims of domestic violence. In the 12 months prior to imprisonment, 37.3% of Queensland participants had been physically abused, 7.1% had been sexually abused and 43.9% had been emotionally abused. The proportion of first time offenders who had experienced physical and/or emotional abuse in the 12 months prior to imprisonment was greater than that of repeat offenders. A lesser proportion of Queensland participants reported some form of abuse in the 12 months prior to imprisonment compared to New South Wales participants (46.2% vs. 57%).
ABORIGINAL PARTICIPANTS

Fifty-three women were identified as Indigenous, however only fifty-one of these women completed the corresponding section of the questionnaire. These women were asked specific questions relating to having been removed from their family, and to use of specialised services for Indigenous people in prison.

Removal from families
Fifteen women (29.4% of Aboriginal participants) reported having been removed from their family as a child, and only four of these women were ever returned to their family. Eight of the women who were removed were aged 5 years or younger when removed, five were aged 6-10, and two were over 10 years old. Two women were removed for a period of less than five years, five were removed for between six and ten years, seven women were removed for more than ten years and one woman did not specify the duration of her removal. During the period of removal from their families, twelve women spent some time with an Aboriginal family, three were placed with a non-Indigenous family, and three were in state run institutions.

Of the 51 Aboriginal women who responded, three women reported that both of their parents were removed from their families as children, and a further three women reported that their mother was removed as a child. Ten women did not know if their parents had been removed as children.

Use of Aboriginal services
The following services had reportedly been used within the prison system: Aboriginal welfare worker (n=25); Aboriginal psychologist (n=20); Aboriginal health worker (n=9); Aboriginal medical officer (n=7); peer support (n=3); Aboriginal legal aid (n=2); ATSI project officer (n=1); Aboriginal liaison officer (n=1); Aboriginal youth worker (n=1).

Of the 38 women providing comments regarding their satisfaction with these Indigenous services, 34 reported being satisfied with the service received and four were not satisfied. Common favourable comments were that the service providers were culturally sensitive and understanding, they helped with problems, and they were easy to talk to. Unfavourable comments were: concerns regarding the professionalism of the service provider; they were unhappy with the service provided; and the service was limited or unavailable to them. One woman reported that she was unaware of such services being available.
COMMENTS FROM PARTICIPANTS

Each participant was given the opportunity to make comments at the completion of the interview. Specifically they were invited to make comment on the survey itself or health care in prison. One hundred and forty-five (68.4%) women chose to comment. Their remarks as written down by interviewers were transcribed verbatim into Microsoft Word 2000. They were then analysed manually by sorting printed copies of the files into themes relating to:

- general comments;
- various aspects of the health service including doctors, nurses, dentists, issues related to specific conditions or existing programs, and confidentiality issues; and
- issues relating to prison life in general including available facilities, food related issues and requested services or programs.

These themes arose during analysis from the data itself and were chosen to incorporate all points of view.

General Comments
The findings from this qualitative analysis should be interpreted in the knowledge that 67 women chose not to comment, and the overwhelming majority of positive comments were of a general nature. Many of the women who had found prison health care in general, or in specific disciplines, to be either acceptable or a positive experience, may well not have commented or commented only in a general way. Similarly, women who had found health care to be poor in many areas may have only reported the most negative experiences.

The majority of women making general comments were “happy with everything” and “pretty good”. Comment was made by three women, all from the Townsville Women’s Correctional Centre, that prison was “too far from family”.

Three women were concerned about treatment received on the basis of race.
“There seems to be a difference between the way whites and blacks are treated.”

Four women commented on prison officers. Two were positive: “All the officers have been very helpful”. One felt more female officers were needed, and one raised concerns about the confidentiality of prison officers: “Officers have discussed inmates private issues”.

Health Services
On the topic of existing health services, comments were made about services in general, doctors, nurses, mental health professionals, dentists, and other health professionals. There was a range of opinions about health services in general.
“I think health care is good.”
“I think the health care in this prison is satisfactory.”
“Health care is just average.”
“Health care is poor – request forms are too slow and often lost.”
“Hope in general the health care of women in prison improves. Stop using us as ‘guinea pigs’.”
One woman felt the care had improved with time.
“In 1998 I nearly died at Boggo Road due to drug withdrawal from methadone / heroin – the medical staff didn’t do anything. Services are better now. The staff never used to care.”

There was some concern about confidentiality breaches.
“Health services are definitely not confidential. If you ask to see the doctor, the nurse asks why in front of male officers. Receiving medications for specific female health problems is not private at all.”
“I don’t think test results and medication are kept private. For example, I was told my positive Hep C result while in the medication line and other inmates and officers heard what was said.”

However, there was more concern over the way health care staff treated individuals on a personal level. Specifically, some women did not feel believed when they approached staff with a problem.
“I was treated with disrespect when pregnant and experiencing pain. I wasn’t believed about the pain and was treated with painkillers and nothing more. It took four weeks to diagnose appendicitis and then I had a miscarriage.”
“Health staff should listen to women’s needs and not presume everybody is hypochondriacal.”

Some women felt that they were not provided with sufficient information about their health and/or their treatment.
“Need to improve prison health service. There is a long waiting list, and lack of information given to the patient…Staff withhold information.”
“We need answers from request forms as to what and when things will happen.”
“There’s no real explanation for some medical concerns.”

Access to services in general was a problem for some.
“They say they will come for medication for pain, and they don’t.”
“It’s hard to get a medical response when ‘locked down’. If we are experiencing health problems, we need to put in a form and you can end up waiting weeks.”
“Should be follow-up and results of pathology test even if normal.”

Although it was recognised that limited staff were available:
“...too understaffed. Staff are burnt out. There is a high staff turnover and therefore not enough ‘attention’ time.

Two women felt that not enough attention was given to therapies other than medications.
“They tend to treat medical conditions with painkillers.”
“I think the medical centre over-prescribes medication.”

**Doctors**
Similar issues to those for services in general arose with regards to doctors. Access to doctors was a problem for a lot of women.
“Need more doctors – have had to wait far too long for appointments.”
“The doctor’s waiting list is too long.”
“It’s very difficult to see a doctor and when you do the visits are quick.”
“To see a doctor when you are sick, you have to wait a couple of days.”
“It took 3 weeks to see a doctor for an earache. I was sick and still had to go to work.”

Three women felt that access was not equal among all inmates.
“Men seem to get first choice of doctors and appointments. Women miss out on seeing a doctor if the male parade takes too long.”
“I believe Aboriginal girls get better health care than white girls. They get in to see the doctor more often with any little complaint. Some see nurses on a daily basis.”
“Unless you’re a ‘druggie’ you get nothing.”

Three women spoke specifically about the lack of access to female doctors.
“Definitely need a female doctor for personal issues. A lot of problems get missed and not spoken about because of the lack of female staff.”
“There is no access to a female doctor.”
“We need more female doctors.”

Many of the concerns raised about doctors related to their attitudes towards inmates. These women felt that the doctors were uncaring and disrespectful.
“Doctors call girls names, like ‘This place is the fat farm and you need to lose weight’. It’s very emotionally upsetting.”
“I was not listened to.”
“He called me into the clinic to receive a positive Hep C result. He offered me no information and when I asked him about Hep C he said to ask the other women in here because 90% of them are junkies and have Hep C.”
“The male doctor....is patronising and refuses to listen.”
“The prison doctor needs to be more understanding. I know that we are in here because we have done something wrong, but I think we still deserve respect. He is very abrupt and distant. He is not impartial. He seems to predetermine medical treatment on our status as prisoners.”

Similar to this last comment, others also called into question the treatment they were receiving from prison doctors.
“The prison doctor tends to make generalizations regarding female inmates health matters.”
“The visiting doctors are not as thorough as they could be in the prison population.”
“The doctors take a long time to diagnose and tend to psychologise medical problems.”

Nurses
Unlike doctors, access to nursing staff did not arise as an issue. Almost all the comments made about nurses regarded their attitude towards prisoners. These women generally felt disrespected and in many cases belittled.
“Nurses are not listening to prisoners. We’re treated as ‘prisoners’ rather than individually and we’re often not believed.”
“...goes out of her way to be nasty. She does not care about patient care.”
“They will call you ’maggots’...Some nurses are not very caring.”
“I feel nurses talk down to me and treat me like I am stupid.”
The remaining comments about nurses called some of their practices into question.
“Nursing staff need more education on methadone and buprenorphine to combat the ignorance of need.”
“We are made to work though we are sick. The nurses will not allow time off even though we are sick.”
“Dispensing of medication gets messed too consistently and nurses won’t listen if you tell them.”

Mental Health Professionals
The overwhelming majority of comments made about mental health professionals including psychiatrists, psychologists and counsellors regarded lack of access.
“More psychiatrists and psychologists needed.”
“Can’t access counsellors.”
“In order to see the psychiatrist, I repeatedly have to put in request forms. Despite the psychiatrist herself telling me I should be seeing her weekly or fortnightly, I end up seeing her monthly.”
“BIG need for more access to counsellors, psychologists and psychiatrists. There’s not enough help for regular counselling and support for many issues.”
“We need more Aboriginal counsellors.”

The remainder of the comments about mental health professionals related to the service they provided and were both positive and negative in nature.
“I see a psychiatrist and find this useful, however the doors must remain open and therefore I won’t say certain things.”
“Happy with the service.”
“Counsellors are useless. They can’t make phone calls because they can’t have a mobile phone.”
“Not happy with the psychiatrist.”

Dentists
Access was also a perceived problem in relation to dentists:
“Would like to see dentist soon. Too long a wait. It’s over 2 months since put in a request. Has a toothache.”
“Dentists need to visit more often.”
“More dentists!! NONE at Numinbah. Too difficult to arrange to go back to BWCC for treatment.”
“Very long waiting list, eg 4 months for dentist.”
“I had to wait 2 and a half years for my dentures. I could not chew therefore I couldn’t eat the food.”

However, the majority of comments about dentists related to their work. All of these were negative in nature.
“Dentist has pulled out wrong teeth.”
“There is not good follow up care.”
“Dentist is poor. Don’t fully check teeth. For example, I have wisdom teeth problems and the dentist is not interested.”
Many of the comments related specifically to the frequency of extractions compared to other treatments.
“Will extract teeth rather than do long and involved treatments to save them.”
“Dentist pulled a tooth out which didn’t need to be pulled out. I had spent $200…in the community to maintain it.”
“Don’t do emergency or preventative work.”
“Need better dental care – not preventative or proactive.”

This view point was supported by the analysis of dental information detailed earlier in this report. A higher rate of extractions versus restorations was identified in these women prisoners compared to the general Australian population.

Two women felt that the dentist did not listen to them and one woman felt that dentistry staff were unsympathetic. One woman disliked the appointment system.
“The dentist prioritises who he wants to see first which is dependant on what is written on the form. This process seems unfair.” While another felt it to be adequate: “The system of seeing him (the dentist) is ok.”

Other Health Professionals
Access to other health professionals was mentioned by a few women. Some expressed a desire for access to be available to particular professionals.
“Should access chiropractor or acupuncture.”
“Dietician for group talks on nutrition.”

While one felt that existing access to an eye specialist was inadequate.
“Optometrist will only come when 10 people are on the list. This is far too long (months) to wait if needing help.”

Programs
Of existing health related programs, only programs for drug addiction were particularly mentioned, with varying points of view expressed.
“I have been advised because my sentence is less than 12 months, (treatment for drug addiction) …is not possible. Please reconsider this lack of treatment for short term offenders so we do not turn into long term offenders.”
“Programs for drug addiction are not achieving anything – it is common sense and it is up to you whether you want to give up.”
“Core programs are a load of rubbish. Rehab is about changing yourself – want to change.”
“Methadone program is extremely inconsistent. Dosing can happen early in the morning, or at 3pm. It’s very hard to get motivated to go to work when focussed on getting methadone. There are often air bubbles in the mix. Need to have a consistent dosing time. If dosing during lunchtime, often miss out on lunch. Dosing time is important to be kept consistent.”

A number of women made suggestions about program implementation within the prison. Often these new program suggestions were health related.
“I would like to see more programs such as sexual health and drug and alcohol management available.”
“Please help people with stopping smoking.”
“Would like pap smears done routinely.”
“Need a mobile breast screening unit to come into prison for mass screening.”
However, some were related to more general issues.
“Need more training for long stayers to prepare people for the outside.”
“People who have never been to jail before need assistance with familiarity to prison – orientation processes need to be increased.”

A number of recommendations were made specifically about new drug-related programs.
“Needle exchange probably wouldn’t work in prison.”
“Should have needle exchange programs in prison as know that drugs get into prison.”
“Desperately need a unit especially for drug addicts – need counsellors, psychologists, heaps of programs and education.”

Participants identified a lack of activities designed to occupy their time.
“They don’t give us enough things to do and we get bored.”
“Not enough stimulating activities – everyone gets bored and cranky.”

A number of concerns were raised about various facilities including transportation to hospital, telephone availability, and exercise areas.
“Aerobics is done on concrete and this has created problems for my legs.”
“The only place to walk is the tennis court and this isn’t always appropriate.”

Food
A number of sub-themes emerged from the comments made about prison life in general. One of the major sub-themes related to the food available in prison. All the comments made in relation to food were negative. Most were general complaints about food quality or an excess of unhealthy foods.
“Too much refined foods in prison. Not enough fibre.”
“All the same sort of food. We need fresh meat and fish.”
“Sometimes the food is not fresh and it is not cooked properly.”
“The food is disgusting and it is too fatty. The ingredients are poor and the cooks are untrained.”

However, over one third of the comments about food were regarding the lack of provision for specific dietary needs. This issue was also highlighted as being problematic by the quantitative section of the survey. Most of the comments of this sort were made by participants from the Townsville Women’s Correctional Centre.
“I am not getting the diabetic food I need except for trim milk. There’s nothing to buy for diabetics.”
“Very hard to get food for diabetic foods for a diabetic diet either from the kitchen or buy-up.”
“Not enough variety of low sugar foods for my diabetic diet.”
“Vegetarian (diet) is not catered.”
Summary
The major themes arising from analysis of the comments made by women prisoners at completion of the interview questionnaire about their health were:

- There was a range of opinions about health services generally in prison. A number of women would like to see improvements occur as a result of the survey.
- The biggest areas of concern about health services were access to the available services and the treatment received. There was some concern over the quality of treatment in prison compared to the community, particularly in the area of dentistry. However, most issues arose with the interpersonal communication skills and general attitude of health staff towards prisoners. These women felt devalued and disrespected as individuals by staff in most of the disciplines of health care. They expressed these feelings both by recalling specific incidents and by general comment.
- A variety of comments were made about the lack of, or quality of, other resources and facilities available in prison. Specifics such as food, space, furnishings, and transport were included.
REFERENCE LIST


Butler T. (1997) Preliminary findings of the NSW Inmate Health Survey. NSW Corrections Health Service.


