Abstract

The aim of this study was to gain information on the prevalence, the nature, and the severity of problematic alcohol and drug use and problematic gambling among prisoners, as well as gaining insight into the needs of this particular group of prisoners. This information was collected by a short (15 minutes) face-to-face screening on problematic use of alcohol and drugs and problematic gambling, conducted among 637 prisoners of eight detention centers. In addition, a selection of 161 problematic users and gamblers also received a one hour face-to-face interview. The data from the screening and the extensive interviews were matched with data on delinquency from already existing registration systems. Furthermore, during a two day meeting, data from the extensive interviews were sorted by experts on basis of perceived helping needs (method Matching Needs and Services). Prior to this empirical study, an extensive literature study was conducted.

Prevalence, nature, and severity of problematic alcohol and drug use and problematic gambling

The aim of the literature study was to gain more insight into the prevalence, nature, and severity of problematic alcohol use, drug use and problematic gambling. A total of 14 Dutch studies were found on this topic, of which 7 studies contained information about regular detention centers. The findings of these studies show a high range of prevalence figures. In regular detention centers, the prevalence of problematic alcohol use ranges from 23 - 33%, and the prevalence of problematic drug use ranges from 30 - 44% (use of hard drugs and/ or cannabis). Little is known about problematic gambling, but studies among particular groups of prisoners suggest that these prevalence rates ranges between 2 en 11%.

The main aim of the screening was to gain more detailed information on the prevalence, nature, and severity of problematic alcohol use, drug use and problematic gambling. The results of the screening implicate that about 60% of the prisoners experience problems with alcohol use, drug use or gambling. Data on the prevalence of particular substances coincide with the data from the literature. Problematic alcohol use was detected among
30% of the prisoners, and problematic drug use (which was defined as problematic use of hard drugs and/or a high risk of problematic cannabis use) among 38% of the prisoners. Problematic use of hard drugs (excluding cannabis) was detected among 24% of the prisoners, with a relative high prevalence of problematic use of cocaine (19%), sedatives (15%) and opiates (12%). Problematic gambling was found among 6% of the prisoners.

Of the problematic substance users and gamblers among prisoners (60%), more than half (53%) experienced problems with more than one substance, i.e., 27% has a problem with two substances, - mainly a combination of hard drugs and cannabis, alcohol and cannabis, and alcohol and hard drugs -, and 26% has a problem with three or more substances, - mainly a combination of hard drugs, cannabis and alcohol. Prisoners who had a problem with more than one substance (including gambling), generally experienced more severe symptoms of substance dependence, substance misuse and craving.

**Characteristics of problematic alcohol users, drug users and problematic gamblers**

Some demographic differences were found between groups of problematic substance users and gamblers. Problematic users of stimulants and cannabis more often were male, whereas problematic users of opiates, cocaine and sedatives more often were female. Both problematic use of alcohol and problematic use of hard drugs was most prevalent among the age group of 25-44 years. Problematic cannabis use, however, was most prevalent among the age group of 18-24 years.

**Psychological and physical co-morbidity**

The majority of the problematic substance users and gamblers showed signs of psychological and physical problems. Among three out of four problematic substance users and gamblers, an indication was found for the existence of a personality disorder, among more than half an indication for the (possible or probable) existence of an anxiety disorder, and among one out of three an indication for the (possible or probable) existence of a depression. Moreover, 40% of the problematic substance users and gamblers showed signs of psychotic symptoms. It should be noted, however, that the reliability of these data is somewhat unclear, because screening instruments were used which do not provide diagnostic information, and because most instruments were not
validated in a sample of prisoners. About 40% of the problematic substance users and gamblers is having physical health problems.

Furthermore, the results show that an indication of a personality disorder was most prevalent among problematic users of XTC and stimulants. Problematic XTC users also experienced anxiety symptoms (de number of problematic XTC users, however, was too small to draw conclusions). In addition, problematic gamblers showed relatively bad psychological health (they scored relatively high on psychotic symptoms, depression and anxiety), as well as problematic users of sedatives (who scored high on anxiety). Prisoners who experienced problems with more than one substance (including gambling) had more psychotic symptoms than those who had problems with one substance only.

**Delinquency**
The longest criminal carrier and the highest number of registered criminal offences was found for problem users of hard drugs, particularly problem users of opiates, cocaine and sedatives. The severity of registered criminal offences, however, was not the highest for problematic hard drug users, but for problematic alcohol users. The prevalence of severe criminal offences, such as murder and theft with physical violence, was more prevalent among problematic drinkers. The number of registered criminal offences was higher among problematic users of more substances than for problematic users of one substance (including gambling).

**Helping needs**
During the two day expert meeting, eight categories of helping needs were distinguished for problematic substance using and gambling prisoners. Overall, experts came up with the following needs (in order of relevance): (1) assistance to help quit or regulate the problematic substance use or gambling habits, (2) assistance with finding a regular job, education or daily activity, (3) assistance to help quit illegal activities, aggressive behaviour, and to take personal responsibility for one’s behaviour, (4) psychiatric diagnostics and treatment, and (5) assistance to overcome restrains in the area of housing.
The most important helping needs mentioned by problematic alcohol users, drug users and gamblers are: (1) assistance to overcome restrains in the area of housing and personal health, and (2) assistance with solving relational problems and limitations.

The present results suggest that there are some differences between the needs mentioned by experts and the needs mentioned by problem users and gamblers. Experts suggest that all categories of problematic users and gamblers are in need of assistance to quit or regulate their problematic substance use or gambling habit. Because this particular need was not assessed among respondents to the extensive interview, no conclusions can be drawn on the discrepancy between experts and problematic users and gamblers. However, there is some discrepancy with regard to the need of assistance to overcome restrains in the area of housing. Whereas this need is regarded to be most important by the target group, experts regard this need to be subordinate to other needs. Experts, on the other hand, emphasize the importance of assistance with finding a regular job, education or daily activity, assistance to help quit illegal activities, aggressive behavior, and to take personal responsibility, and psychiatric diagnostics and treatment. These needs, however, are not subscribed by the target group. The present findings do have implications for the implementation of care and treatment interventions for problematic substance users and gamblers in detention centers.