

Disability in French Prisons

How Does the Situation Differ from That of the General Population?

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By extending the HID (Handicaps, Incapacités, Dépendance) disability and dependency survey to the prison population, it became possible for the first time to compare data on the health of prison inmates with the results obtained for the population in general. In this article, Aline DÉSESQUELLES presents the results of the survey conducted in 2001 on around 1,300 inmates of thirty different prisons.

All types of impairment or deficiency identified by the survey, which may or may not result in restriction of activity, are much more frequent among prisoners than in the general population. Beyond an incontestable selection effect at entry into prison, the author demonstrates the specific effect of duration of imprisonment on the onset or aggravation of disabilities. Last but not least, the study classifies prisoners into different categories according to the types of disability suffered and the corresponding types of assistance or adaptation required. Such information is key to addressing the problem of disability in the prison environment.

Over recent years, the health of the French prison population has been a regular focus of attention. In 1997, a special issue of the *Revue française des affaires sociales* (French welfare policy journal) was devoted to this question. At that time, Olivier Obrecht (Obrecht, 1998) noted that:

“The prison environment has altered radically over the last twenty years, with a significant change in the sociological profile of the prison population. Generally speaking, there are fewer simple thieves and a growing number of drug addicts, sex offenders and illegal immigrants. These changes have been accompanied by a concomitant decline in the state of health of prisoners.”

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When asked if “prisons have become centres for the medical treatment of the socially marginalized, the poor and all those that society is increasingly incapable of integrating” he gave an immediate affirmative response, sharing the view expressed by Michèle Colin and Jean-Paul Jean that “prisons have become receptacles for the marginal members of society” (Colin and Jean, 1997). In 1997, 5% of new prisoners were homeless, 10% lived in insecure housing and 18% had no social protection (Mouquet et al., 1999). Individuals facing economic insecurity—often synonymous with limited access to healthcare, inadequate hygiene and preventive care, and high-risk behaviour—are especially prone to disability and disease. For example, the survey of homeless users of assistance services (de la Rochère, 2003) showed that the frequency of illness or injury in this population is double that of the population as a whole.

The growing economic insecurity of the prison population is associated with a second observation: its ageing. In 2001, there were slightly more than 5,000 prisoners aged 50 or over in France and, though this figure is still relatively low, it has more than doubled since the early 1990s (Kensey, 2001). This trend is the result of a legislative amendment relating to the term of limitation for sex offences⁽¹⁾ which has led to the conviction of older offenders, longer prison sentences following the introduction of the new penal code, and fewer conditional discharges.

A third and last observation concerns the lack of information on the state of health of prisoners, in relation to disability in particular.

“There is a lack of serious information on the state of health of prisoners. [...] For example, though prisoners with disabilities constitute a clear category with specific needs, no quantitative data concerning them are available.” (Guillonneau and Kensey, 1997).

Against this background, the survey of disability and dependency in the prison population (*Handicap-Incapacité-Dépendance HID-prisons*) whose results are presented in this article, provided an opportunity to fill a certain void. Instigated by INSEE in 1998, the survey was designed and coordinated by INED⁽²⁾. The main objective was to assess the situation in French prisons with regard to disability and, profiting from the availability of identical data relating to ordinary households and institutions, to compare the prison population with the general population. Another aim was to determine the scope and nature of needs of assistance among prisoners. After a brief description of the survey methodology⁽³⁾, the main results of this operation are presented and analysed.

⁽¹⁾ Act 94-89 of 1 February 1994.

⁽²⁾ The survey is the result of a partnership—notably financial—between INED, INSEE, and the French Ministries of Justice, of Employment and Solidarity and of Health.

⁽³⁾ For further details, refer to the article published in *Courrier des Statistiques* (Désequeles, 2003).

I. Presentation of the *HID-prisons* survey: an extension of the *HID* survey of the general population

The *HID-prisons* survey is an extension of the 1999 INSEE survey of persons living in ordinary households (*HID-ménages*) and the 1998 survey of persons in residential care institutions (*HID-institutions*). These two surveys now serve as references in France for the study of handicap and disability (Mormiche, 1998). *HID-ménages* and *HID-institutions* concerned a total sample of 22,000 people of all ages, representative of the majority of the population living in metropolitan France. Certain sub-populations were outside the scope of this survey however. Hence the idea of organizing a specific operation for the prison population. Surveys relating specifically to mental health problems in the prison environment, or to other pathologies or risk behaviours common among prisoners (AIDS, hepatitis C, drug addiction, alcohol consumption) have been conducted recently. The originality and interest of the *HID-prisons* survey lies in the scope of the problems covered, the range of suggested explanatory factors and the opportunities it provides for comparing the results obtained with those of the general population.

1. From impairment to handicap: theoretical framework

To guarantee this comparability, we first ensured that the *HID-prisons* survey questionnaire was as similar as possible to those of the *HID-ménages* and *HID-institutions* surveys. In fact, the *HID-prisons* questionnaire most closely resembles the latter. A prison is “almost” an institution like any other, except for the fact that inmates are not free to come and go as they please. For this reason, the formulation of certain questions was substantially modified⁽⁴⁾, and other questions, irrelevant to life in prison, were removed⁽⁵⁾.

More generally, the *HID* questionnaire was designed to identify the widest possible range of disabilities, whatever their physical, mental or even cultural origin⁽⁶⁾. The underlying theoretical model is the classification defined by Wood (WHO, 1980), which establishes a relation of causality between the following aspects of disability:

—an *impairment* is any loss or abnormality of psychological, physiological, or anatomical structure or function. In the *HID* questionnaire, impairments are detected by the following question: “Do you experience any physical, sensory, intellectual or mental difficulties in your everyday life as a result of an accident, a chronic illness, a birth defect, an infirmity, old age, etc.?” Persons who replied yes to this question were invited to

⁽⁴⁾ Questions about movements for example.

⁽⁵⁾ Questions about purchases or holidays for example.

⁽⁶⁾ Difficulties with reading or writing, language problems.

specify the nature and the origin of these impairments. As the information obtained in this way was very heterogeneous, it was reformulated by a team of specially trained physicians to distinguish the impairments from their origins (disease, accident, congenital malformation, etc.).

—*disability* corresponds to any restriction or lack of ability to perform an activity in the manner or within the range considered normal for a human being. An entire module of the questionnaire was devoted to identifying these disabilities. Five major realms were identified: 1) washing, dressing and eating; 2) using the toilet; 3) transfers and movement (moving from one seat to another, moving around by oneself); 4) seeing, hearing, speaking (difficulties due to a sensory problem); 5) joint mobility and object grasping (use of fingers, hands, feet). In this article, the term physical disability designates the existence of difficulties in at least one of these realms. This is incorrect usage, since some of these disabilities are probably due to a mental problem. But it serves to distinguish them from disabilities of exclusively mental origin which are identified by questions on temporal⁽⁷⁾ or spatial⁽⁸⁾ orientation and on behavioural problems (communication difficulties not linked to a sensory problem, aggressive or impulsive behaviour, self-endangerment).

The way the questions were answered also provides a means to distinguish between severe disabilities (performs unaided with substantial difficulty/requires partial or total assistance) and moderate disabilities (performs unaided with some difficulty). In this article, only severe disabilities are taken into account.

—*handicap* results from an impairment or a disability that limits or prevents the fulfilment of a normal role, depending on age and other factors. So handicap does not depend solely on the physical or mental state of a person, but also on his environment: type of housing, availability of assistance, adaptation of means of transport and living environment, etc. In the survey questionnaire, handicap is approached via several modules concerning aspects such as school enrolment, employment and relations with the family.

2. Collection protocol and results

Despite constraints specific to the prison environment, efforts were made to ensure that the questionnaires were administered under conditions as similar as possible to those applied for the general population. But from the very first tests, a second objective also emerged: to limit non-response.

In the general population, the *HID* survey questionnaire was administered face-to-face by INSEE interviewers. For ordinary households, the *HID* questionnaire was preceded by a “Daily Life and Health” (*Vie Quoti-*

⁽⁷⁾ Not remembering what time of day it is.

⁽⁸⁾ Having difficulty finding one’s way around.

dienne et Santé – VQS) screening survey whose purpose was two-fold: to identify persons with disabilities and to constitute a control sample. In the end, the most satisfactory protocol for prison inmates turned out to be very similar to the one used for ordinary households. Despite the expected high prevalence of disabilities, it was decided to maintain the screening phase via a short questionnaire (*VQS-prisons* questionnaire) practically identical to the one used for households. But instead of being self-administered, it was filled in by INSEE interviewers through face-to-face interviews⁽⁹⁾. The *HID* questionnaire was administered immediately afterwards to persons who satisfied the following screening criterion: a positive answer to one of the 13 questions relating to the presence of disabilities, restriction of activity, a handicap or a need of assistance linked to a health problem.

The survey was conducted in May 2001 after randomly selecting 32 establishments (25 remand prisons⁽¹⁰⁾, 6 detention centres⁽¹¹⁾ and 1 high-security prison⁽¹²⁾) from among all penal institutions located in metropolitan France. For each establishment, the interviewers drew a sample of 50 to 100 inmates. Three categories of prisoners were excluded from the sample:

- minors, who could not be interviewed without parental consent;
- prisoners on partial release⁽¹³⁾ who were not available during the authorized interview periods;
- hospitalized inmates, since the aim of the survey was to identify chronic disabilities, while hospital patients generally suffer from temporary disabilities. This choice tallies with the choice made for the general population, since only long-stay hospital units were included in the *HID-institutions* survey. So comparison is not affected—quite the contrary—by the exclusion of this sub-population.

At 1 May 2001, the population included in the scope of the survey totalled almost 44,000 people. The initially selected sample comprised 2,800 inmates, of which 2,031 (1,951 men and 80 women) first answered the *VQS-prisons* questionnaire. The failure rate was 27.5%, with 20.9% due to refusals and 6.6% due to circumstances that made the interview impossible⁽¹⁴⁾. The variation in participation rates between establishments (from 47% to 96%) is very large. As a general rule, they were higher (82% on average) in prisons with fewer than 150 inmates, where it is easier to mobilize personnel and prisoners, than in larger establishments.

⁽⁹⁾ For the survey of ordinary households, the questionnaire—distributed at the time of the general population census—was self-administered.

⁽¹⁰⁾ Remand prisons receive remand prisoners and convicted prisoners with less than one year to serve.

⁽¹¹⁾ Detention centres receive convicts serving terms of one year and over and considered to have the best prospects of social rehabilitation.

⁽¹²⁾ High-security prisons receive the toughest convicts.

⁽¹³⁾ A special detention regime under which prisoners spend only the night in prison.

⁽¹⁴⁾ Prisoners transferred/released between the time of sample design and the time of interview, prisoners deemed dangerous, prisoners not authorized to communicate, prisoners in the disciplinary wing.

Out of the 2,031 prisoners who answered the *VQS-prisons* questionnaire, 950 satisfied the screening criterion. This sample was associated with a control sample of 364 individuals who did not satisfy the screening criterion. So a final total of 1,314 persons were invited to answer the *HID* questionnaire and 1,284 interviews were actually conducted. 13 people refused to reply and 17 were deemed incapable of doing so, most often because of a language problem (12 cases), and more rarely because of a health problem (4 cases). All the results presented in this article concern this sample of 1,284 prisoners who, thanks to the inclusion of a control sample and, of course, after weighting to correct for the distortion introduced by screening, is representative of the population included in the scope of the survey.

Given the relatively high failure rate for face-to-face surveys, there was a significant risk of major bias due to a selection effect. It was feared that healthy prisoners, believing that the survey did not concern them, would decide not to take part or that, conversely, prisoners in very poor health would be excluded because they were unable to come to the visiting room. To reduce the risk of bias, an additional information gathering process was organized. The physicians of the 32 participating establishments agreed to assess the individual state of health of all initially selected prisoners, whether or not they subsequently answered the *VQS* questionnaire. This four-level assessment (excellent/good/poor/very poor health) was generally based on the prisoners' medical files. The information thus obtained, cross-checked against available data on survey participation, showed that there was no selection of surveyed prisoners in relation to their general state of health as assessed by the prison physicians (Désésquelles, 2003).

II. Prisoners are clearly disadvantaged

To compare the situation of prisoners with that of the “free” population⁽¹⁵⁾, differences in the age structure of these two sub-populations must be taken into account. In May 2001, the median age of the prison population was 31, compared with 45 for the rest of the population. Moreover, analysis of data from the *HID-ménages* and *HID-institutions* surveys has revealed major disparities in terms of disability between men and women (Mormiche et al., 2000; Cambois et al., 2003). As women only represent 4% of the prison population, all figures relating to the general population presented here are calculated on the basis of an age and sex structure standardized to that of the prison population.

⁽¹⁵⁾ Also referred to in this article as the “general population”.

1. Impairments are twice as frequent in prison

Two out of three prisoners have at least one impairment (Table 1). For a similar age and sex structure, this proportion is double that of the general population. Intellectual and mental impairments are the most frequent. They concern 45% of the prison population, a proportion three times higher than that of the general population. Other studies have obtained similar findings for the extent of this type of problem in the prison environment. According to the DREES survey of mental health among new prisoners, 55% of new arrivals suffer from at least one psychiatric disorder (Coldefy et al., 2002). Situations grouped under the heading “intellectual or mental impairments” appear to be very varied. In particular, it is probable that not all are attributable to a mental illness but correspond, as described below, to symptoms of anxiety and depression which may be indicators of psycho-social distress (La Rosa, 1998).

The other impairments identified by the survey are also much more common in prison than in the general population, though generally around twice as frequent.

- One in four prisoners has a motor impairment, most often a back problem (11% of the prison population vs. 6% of the general population). It is well known that injuries are very common in prison. The causes are varied: risk behaviour before imprisonment, injury when committing an offence or during arrest, accidents in prison (sports or work accidents, fights between inmates) or self harm (Lalande, 1997).
- One in five prisoners has a visceral or metabolic impairment. The prevalence of this type of impairment is particularly high among prisoners aged 50 and above (2 in 5), exceeding that of intellectual and mental impairments. Respiratory and cardiovascular impairments each affect 7% of the prison population, compared with 2% of the general population.
- One prisoner in five has at least one sensory impairment. Visual and auditory impairments each concern one prisoner in ten, with a prevalence double that observed in the general population. The difference between the two populations is even more pronounced for language and speech impairments (5% of prisoners vs. 1% of the general population).

Lastly, dental problems⁽¹⁶⁾ are also very common (6% of the prison population), beyond age 50 especially (18% of this age group). The link between economic insecurity and poor oral and dental health is well established (Hassoun, 1998) and can be explained by inadequate oral and dental

⁽¹⁶⁾A specific coding system was used for this type of impairment in the *HID-prisons* survey due to the high frequency of problems reported. No equivalent data is available for the general population.

TABLE I.— TYPES OF IMPAIRMENT IN THE PRISON POPULATION: PREVALENCE BY AGE AND COMPARISON WITH THE POPULATION AS A WHOLE (%)

Type of impairment ^(a)	Age 18-29	Age 30-49	Age 50 or over	All prisoners	All free population ^(b)
Motor impairment	18.4	29.2	30.9	24.6	11.3
of which:					
<i>Trunk impairment</i>	7.1	13.8	13.3	10.8	5.9
<i>Impairment of one arm</i>	4.5	5.6	6.7	5.2	1.9
<i>Impairment of one leg</i>	4.2	6.2	3.3	5.0	1.8
Visual impairment	5.9	10.2	20.2	9.5	4.3
Auditory impairment	5.3	11.4	29.9	10.9	5.0
Language or speech impairment	4.5	4.4	6.1	4.7	1.4
Visceral or metabolic impairment	11.7	23.8	39.1	20.3	8.8
of which:					
<i>Cardiovascular impairment</i>	2.3	8.0	21.7	7.1	2.2
<i>Respiratory impairment</i>	4.7	7.2	12.1	6.7	2.2
<i>Impairment of the digestive tract and organs</i>	2.4	6.7	6.3	4.8	2.6
Intellectual or mental impairment	45.8	45.7	36.8	44.7	14.6
of which:					
<i>Behaviour disorder, personality disorder, impairment of relational capacities</i>	17.0	13.6	6.0	14.2	0.3
<i>Loss of intellectual capacities, memory impairment, spatial/temporal disorientation</i>	11.3	13.6	9.4	12.1	1.2
Other impairment	4.2	11.4	22.7	9.6	3.0
of which:					
<i>Dental problems</i>	1.7	6.6	17.5	5.7	<i>n.a.</i>
<i>Vertigo</i>	1.3	1.5	2.2	1.5	0.1
<i>Aesthetic impairments</i>	0.6	1.8	2.0	1.3	1.0
Unknown	3.0	3.2	7.9	3.7	1.2
At least one impairment	60.8	70.8	82.5	67.8	32.8

^(a) This table lists the major groups of deficiencies identified by the survey and, for each one, the most frequently reported impairments.

^(b) The free population includes the population living in ordinary households and in residential care institutions. The prevalence rates have been standardized according to the age and sex structure of the prison population.

Source: HID-prisons survey 2001, HID 1998 and 1999 surveys.

hygiene and limited access to healthcare (Dargent-Paré et al., 2000). Prolonged and regular drug abuse, which concerns one incoming prisoner in three (Mouquet et al., 1999), also has a likely impact⁽¹⁷⁾.

The prevalence of impairments increases with age. Of course, this increase is linked to biological ageing, though other factors are also involved. The difference between the general population and the prison population is more pronounced at ages 18-29 than at age 50 and above, with the prevalence ratio falling from 2.1 (60.8% vs. 28.5%) in the first age group, to 1.6 (82.5% vs. 51.8%) in the second. This does not signify that people age faster on the outside than in prison. Prisoners aged 50 or more have not all spent many years in prison. Though the average period of imprisonment is higher in this age group (3.8 years) than among younger prisoners (2.1 years for the 18-29 age group), more than two-thirds of prisoners aged 50 or over have been in prison for less than five years. The trend observed more probably corresponds to a “selection” at entry into prison of sub-populations more disadvantaged in terms of health at younger ages than at older ones. This is borne out by the fact that, unlike other impairments, the prevalence of intellectual and mental impairments is higher among the under-50 age group (46%) than among prisoners aged 50 and above (37%).

The origin of impairments reported in prison (Table 2) is quite different from that observed among the general population⁽¹⁸⁾. While half of the people in the general population (for an age and sex structure equivalent to that of the prison population) attribute their impairment to illness, the proportion falls to slightly over one-third among the prison population with at least one impairment. Accidental causes are more frequent in prison (27% vs. 20% in the general population). Analysis at a finer level shows that this result is also valid for traffic accidents (10% vs. 3%), but not for occupational injury (4% vs. 8%). It is in the somewhat heterogeneous “other causes” category that most of the reported impairments are classified. This category includes personal and family problems (30% in prison vs. 23% in the general population), ageing, which is cited by 7% of persons with impairments in both the prison and general populations, and alcohol and drug consumption (8% vs. 1%). It comes as no surprise that addictive behaviours, which have numerous impacts on physical and mental health, are over-represented in the prison environment. According to the survey of new prisoners already mentioned above (Mouquet et al., 1999), one in ten regularly consumes excessive amounts of alcohol and one in three regularly takes drugs.

⁽¹⁷⁾ Consumption of heroin and neuroleptics provokes tooth decay.

⁽¹⁸⁾ It is not a question of the prevalence of these different causes among the prison population, but of the proportion, among all prisoners with at least one impairment, of those who attribute the impairment to a given cause. A single impairment may have several causes, and a single prisoner may have impairments due to multiple causes. Consequently, the sum of the proportions given in Table 2 is not 100%.

TABLE 2.— ORIGIN OF IMPAIRMENTS IN PRISON AND COMPARISON WITH THE GENERAL POPULATION⁽¹⁹⁾ (%)

Cause of impairment	Age 18-29	Age 30-49	Age 50 or over	All prisoners	All free population ^(a)
Accident of which:	24.7	31.4	18.1	26.8	20.1
Occupational injury	0.8	6.1	6.9	4.1	7.6
Traffic accident	9.8	11.9	3.6	9.9	3.2
Pregnancy complication	7.0	6.4	5.7	6.5	7.7
Congenital malformation	3.0	4.1	0.7	3.1	4.4
Disease	20.3	41.1	59.0	35.5	49.1
Other causes of which:	53.1	54.7	60.1	54.8	39.4
Ageing	0.1	6.2	25.1	6.5	7.8
Personal and family problems	31.2	28.8	23.3	28.9	22.7
Alcoholism, drug addiction	10.7	7.5	1.3	7.9	0.9
Stress	25.1	31.1	27.7	28.2	n. a.

^(a) Prevalence rates standardized according to the age and sex structure of the prison population.
Scope: Persons who reported at least one impairment.
Source: HID-prisons survey 2001, HID 1998 and 1999 surveys.

Lastly, 28% of prisoners blame their impairment on “stress”⁽²⁰⁾. In two-thirds of cases, the prisoners specified that this stress was linked to their detention, though this type of problem is already strongly represented at the time of entry into prison: 55% of disorders identified among new prisoners are anxiety disorders (Coldefy et al., 2002). So it is perhaps more accurate to talk about stress linked to prison entry rather than to detention. The consequences of these anxiety states should not be underestimated as they form the clinical framework for most cases of self-destructive behaviour, self-harm and suicide (de Beaurepaire, 1997).

2. The gap is even wider for disabilities

Slightly more than one prisoner in five has at least one physical disability (Table 3). For a similar age and sex structure, the proportion is almost three times that of the general population, and hence even higher than for the presence of an impairment. So although not all impairments result in disability, it would appear that this is more frequently the case among the prison population than among the general population. This is especially true for disabilities linked to a sensory problem: the difference in prevalence between the two populations (17% vs. 6%) is much larger

⁽¹⁹⁾ The results presented in this table are very different from the results presented previously in *Insee-première* no. 854 (Désesquelles et al., 2002), as the sources used for the two tables are different. In the present case, the table gives information on the origin of impairments collected during administration of the *HID* questionnaire. In the case of *Insee-première*, the data was based on replies to a question in the *VQS* questionnaire on the origin of reported restrictions of activity.

⁽²⁰⁾ This was the term used by the prisoners themselves.

TABLE 3. – PREVALENCE OF DISABILITIES IN PRISON COMPARED WITH THE GENERAL POPULATION (%)

Proportion of persons who reported:	Age 18-29	Age 30-49	Age 50 or over	All prisoners	All free population ^(a)
Difficulties washing and/or dressing and/or eating	0.4	2.3	4.4	1.7	1.4
Difficulties in using the toilet	0.7	0.6	2.9	0.9	0.7
Difficulties with transfers and/or movements	1.7	4.0	9.1	3.6	1.4
Visual, auditory or speech difficulties	11.1	18.5	36.2	17.3	5.7
Joint mobility and/or object grasping difficulties	3.3	6.5	13.3	5.9	2.9
At least one physical disability	14.7	24.5	45.1	22.7	8.1
Temporal disorientation	12.1	12.9	10.1	12.3	2.1
Spatial disorientation	0.8	2.1	1.1	1.8	1.0
Communication difficulties	1.1	1.9	1.8	1.5	0.5
Other behaviour problems	37.2	32.7	24.6	33.7	12.4 ^(b)
At least one disability	45.8	49.2	59.5	48.9	13.0 ^(b)
A restriction of activity due to a health problem	22.9	31.3	41.3	29.0	4.8 ^(b)
An officially recognized level of disability	3.2	9.7	16.2	7.6	6.7

^(a) Prevalence rates standardized according to the age and sex structure of the prison population.
^(b) The figure given for comparison only concerns persons in ordinary households.
Source: *VQS-prisons* and *HID-prisons* survey 2001, *HID* surveys 1998 and 1999, *VQS-ménages* survey 1999.

than for sensory impairments (21% vs. 10%). Compared with the proportion of prisoners with a motor impairment (25% of prisoners, cf. Table 1), the prevalence of disabilities liable to be caused by sensory impairment appears to be very low: 2% of prisoners have difficulty washing, dressing and feeding, 6% have problems of joint mobility or object grasping and 4% have transfer or movement problems. Altogether, 8% of prisoners have one of these types of disability.

Problems of temporal orientation are especially frequent in prison (more than one prisoner in ten). They may well be a direct consequence of detention, since prisoners tend to have a distorted sense of time, notably in remand prisons where “they are always waiting for something: a transfer to another cell, a place in a sports activity, a job, permission to see a visitor or a lawyer, a trial etc. In a remand prison, time stands still. Time becomes a arbitrary succession of moments” (Plichart and Golse, 1997). The gap between the prison population and the general population is substantially smaller for the much less frequent problems of spatial orientation and communication⁽²¹⁾, though prisoners are always disadvantaged. The other behaviour problems concern one prisoner in three. More precisely, 27% of prisoners reported that they were sometimes over-aggressive or impulsive, and 18% that they had put themselves in danger through their behaviour. Unfortunately, in the *HID-institutions* survey, questions relating to such behaviour were only put to interviewees aged under 15. So comparison is only possible with the population living in ordinary households. Given the probable high frequency of such behaviour in institutions, the large gap observed (34% vs. 12%) probably overestimates the real difference between the prison population and the rest of the population.

Lastly, one prisoner in two has at least one disability. The prevalence of restriction of activity due to a health problem (29% vs. 5% in ordinary households) is lower, since the presence of a disability does not necessarily lead to restriction of activity (Ravaud et al., 2002). Moreover, 8% of prisoners have an officially recognized level of disability, a proportion very close to that observed among the general population. Of course, official recognition of a level of disability only partly reflects the severity of this disability; it also measures the person’s ability to go through the procedures for obtaining such recognition.

Figure 1 shows the intersections between the various sub-populations. A total of 68% of prisoners have at least one impairment, one disability, one restriction of activity or one recognized level of disability. The inclusion of the group with at least one disability in the group of persons with at least one impairment is linked to the structure of the questionnaire: all persons reporting a disability were asked to give the cause. But the fact that

⁽²¹⁾ For ordinary households, only people who needed help to fill in the questionnaire were asked about communication difficulties (excluding sensory problems). We assumed that those who were able to fill in the questionnaire without help did not have any difficulties in this respect.

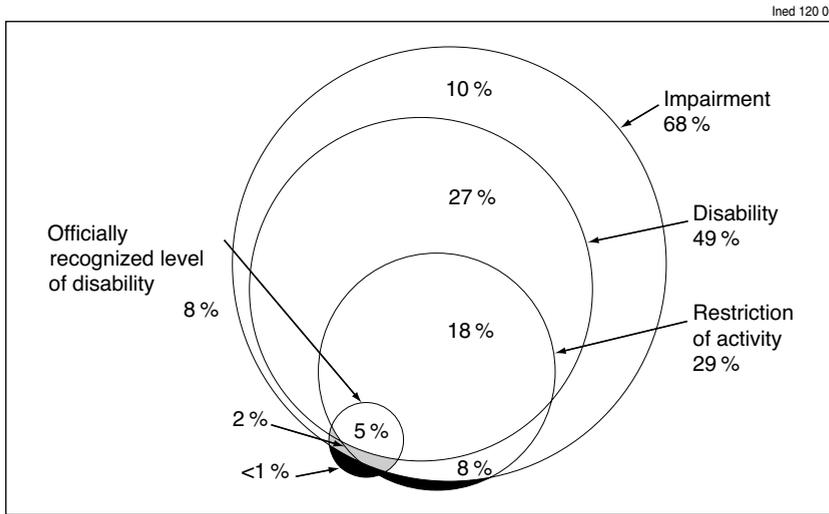


Figure 1.– Overlap between different sub-populations obtained using different approaches to handicap

Scope: Prison population.

Source: VQS-prisons survey and HID-prisons survey 2001.

the other circles are almost fully contained within the impairment circle was not determined in advance. Note, however, that 9% of prisoners reported a restriction of activity but not a disability⁽²²⁾. Almost three-quarters of those with an impairment have a disability, and 43% have a restriction of activity. 13% of those with a disability and 21% of those with a restriction of activity have an officially recognized level of disability. A total of 2,200 prisoners combine all four characteristics. They are much older than the prison population as a whole (median age: 43). All the disabilities taken into account in this study are more prevalent⁽²³⁾ in this group than in the rest of the prison population, and prisoners in penitentiary centres⁽²⁴⁾ are over-represented (42% vs. 30% of the prison population in general).

⁽²²⁾ Ravaud (Ravaud et al., 2002) obtained a similar result with data from the *HID-ménages* survey.

⁽²³⁾ Behaviour/disorientation: 63% – Seeing/hearing/speaking: 43% – Transfers/movements: 21% – Joint mobility/object grasping: 36% – Washing/dressing/eating: 12% – Using the toilet: 6%.

⁽²⁴⁾ Detention centre or high-security prison.

III. Selection at entry or damaging effects of detention?

In this presentation of the survey results, a number of hypotheses have been put forward to explain the differences observed between the prison population and the general population. A more detailed analysis will now be made, distinguishing between two main types of explanatory factor:

—Factors which correspond to a selection effect at entry into prison. In other words, the prison “recruits” on a selective basis from among persons suffering from disabilities or who are liable to develop disabilities (vulnerability);

—Factors corresponding to a damaging effect of detention.

1. Selection effect

There is clearly a direct link between a person’s criminal record and his or her state of health. For example, alcohol consumption, whose damaging effects on health are well known, plays an important role in criminal offences against individuals. The same is true for drug abuse, which is in itself a criminal offence. Lastly, as mentioned earlier, it is often the very circumstances of the crime or arrest which, due to their violence, are responsible for the injuries and disabilities suffered.

Beyond this obvious link between criminality/delinquency and behaviour that is damaging to health, selection at entry could also occur more indirectly, given the increasingly disadvantaged profile of new prisoners, as pointed out in the introduction to this article. It is well-known that there are major social inequalities in relation to disability (Mormiche et al., 2000). As is the case for mortality, the scale of disability risk is a mirror image of the social hierarchy. Moreover, the over-representation of persons from the working classes is well-established (Kensey et al., 2000). So there are good grounds for believing that these two factors combine in prison to produce the observed differences. What happens if, in addition to age, the socio-occupational category is also taken into account? In a previous article (Désésquelles et al., 2002), it was shown that for a similar socio-occupational category, the prevalence of disabilities remains much higher in prison than outside. An identical result is obtained for impairments (Figure 2). The gap between the prison population and the general population is smaller for practically all socio-occupational categories however, indicating the non-zero influence of this effect.

Selection by socio-occupational category at entry into prison does not explain, or to be more precise, only very partially explains the higher prevalence of disabilities in prison. This nuance is necessary, since the demonstration presents certain weaknesses. Firstly, due to an inadequate

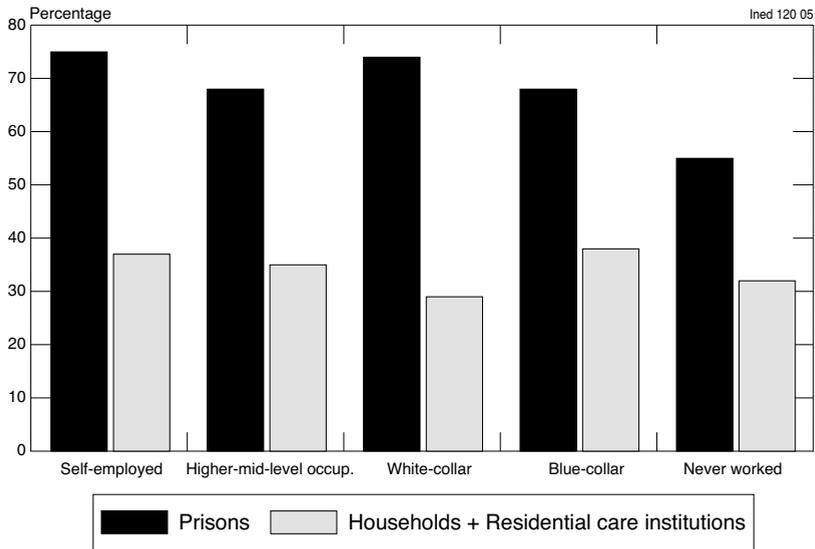


Figure 2.– Proportion of persons with at least one impairment by place of residence and socio-occupational category (%)

Note: To calculate the proportions for ordinary households and residential care institutions, it was assumed that for each socio-occupational category the age structure of this population is identical to that of the prison population.

Source: *HID-prisons* survey 2001, *HID* surveys, 1998 and 1999.

sample size, the chosen socio-occupational categories are broad and hence relatively heterogeneous. Moreover, persons' occupations⁽²⁵⁾ are recorded without taking account of their employment status. For any given occupation, the proportion of prisoners who were unemployed is likely to be higher than on the outside, and among the unemployed, the proportion of those in a situation of severe economic insecurity is probably higher among the prison population.

2. *Specific effect of detention*

A period of imprisonment is liable to affect the physical and mental health of prisoners and hence the existence of impairments or disabilities. Certain authors (Lalande, 1997) highlight the "pathogenic" nature of the prison environment, resulting in a resurgence or aggravation of certain pathologies⁽²⁶⁾ due to anxiety generated by imprisonment and poor conditions of hygiene. Likewise, the violence of relations between prisoners is a

⁽²⁵⁾ For prisoners, their last occupation prior to imprisonment.

⁽²⁶⁾ Notably asthma, gastro-duodenal ulcers, skin disorders.

continual source of psychological trauma (de Beaurepaire, 1997). But the effect of detention is also expressed more subtly through an alteration of prisoners' personal body image. The loss of self-esteem associated with imprisonment may be severe enough to result in bodily neglect. But this low self-esteem and the need to build a more positive self-image sometimes have more unexpected consequences: "for some, the very status of invalid, globally disparaged, provides a means to obtain a recognized status" (Parizot, 1998). Of course, the possibility that certain prisoners deliberately exaggerate their health problems in the hope of making life easier for themselves cannot be ruled out. But this tendency may also exist on a much more unconscious level. The tough living conditions, lack of activity and withdrawal often observed in prison may result in greater bodily awareness, increased sensitivity to pain, an exacerbation of the difficulties experienced or even a tendency towards somatization.

Clearly, analysing the consequences of detention is a complex task. What does the *HID-prisons* survey tell us about the damaging effects of life in prison? In what way does time spent behind bars affect the development of disabilities? The *HID* survey does not provide a totally satisfactory answer to this question, since it only covers the current period of incarceration and gives no data on previous periods of imprisonment, if any. This reserve aside, note that most reported disabilities pre-date the current period of imprisonment. This is the case for 77% of reported physical disabilities and 61% of temporal and spatial orientation problems⁽²⁷⁾.

It is possible to reconstruct the situation of prisoners at the time of their imprisonment. Figure 3 clearly shows that the difference with respect to the rest of the population in terms of physical disabilities, already present at the time of imprisonment, increases thereafter. For a more detailed insight, a multivariate analysis (logistic regression) was performed to study the specific effect of time spent in prison on the presence of impairments or disabilities (Table 4). When time spent in prison under current sentence is above five years, the probability of having an impairment or a disability is significantly higher. But does this effect correspond to a form of selection, with long-stay prisoners being in a poorer state of health at entry into prison than the others, or to an effect of time spent in prison? To test this point, another regression was performed, this time including only prisoners serving sentences of at least five years (Table 5). If the effect observed previously was entirely the result of a selection effect at entry into prison, there should be no significant correlation between time spent in prison and the presence or impairments or disabilities. Yet there is still a correlation, and it is even stronger than before. This result suggests that there is indeed a selection effect, but that it operates in reverse to the one that might be expected: prisoners serving sentences of at least five years tend to be in better health at the time of entry than those on shorter sentences.

⁽²⁷⁾ The history of behaviour problems is not known.

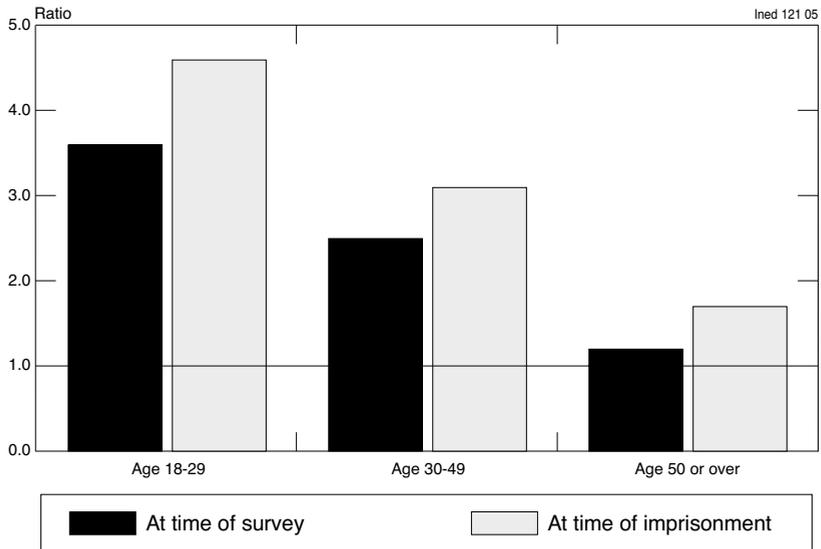


Figure 3.– Ratio of prevalence of physical disability in prison to prevalence in the general population: comparison of situations at the time of survey and at the time of imprisonment

Note : The data reconstituted at the time of imprisonment only take account of disabilities whose history is known.

Interpretation: At ages 18-29, at the time of survey, the proportion of persons with at least one physical disability was 4.6 times higher in prison than in the general population. It was 3.6 times higher at the time of imprisonment.

Sources: HID-prisons survey 2001, HID surveys, 1998 and 1999.

Table 6 clearly illustrates these results. Whatever the disability indicator used, prevalence in a given age group increases sharply when time spent in prison is above five years. For example, at age 50 or above, the prevalence of physical disability rises from 37% among inmates who have been in prison for less than five years, to 66% among those who have been in prison for longer.

This evidence of a negative effect of time spent behind bars on the presence of impairments or disabilities necessarily raises the question of how these problems should be dealt with in the prison environment. We have noted that the difference between the prison population and the general population is less pronounced for impairments than for disabilities, be they physical or mental. The difference observed for disabilities may be partly attributable to less effective treatment of impairments which tend to worsen as a consequence and, in time, become incapacitating. Of course, this does not explain the difference observed for impairments. Applying the same reasoning, one could hypothesize that for lack of appropriate treatment before or during imprisonment, the various causes of impair-

ments (illness, accident, etc.) more frequently give rise to impairments among prisoners. It is impossible, however, to verify this point using data from the *HID* survey, since the potential causes of impairments are not known unless they are actually responsible for one or more impairments.

TABLE 4.— FACTORS INFLUENCING THE PRESENCE OF A HANDICAP (ODDS RATIOS)

	At least one impairment	At least one physical disability	At least one disability
Sex			
Male (Ref.)	1.0	1.0	1.0 n.s.
Female	1.3 n.s.	2.0*	1.6
Age			
Age 18-29 (Ref.)	1.0	1.0	1.0 n.s.
Age 30-49	1.4*	1.6**	0.9 n.s.
Age 50 or over	2.6***	4.5***	1.5
SOC			
White-collar worker (Ref.)	1.0	1.0	1.0 n.s.
Self-employed	0.8 n.s.	0.9 n.s.	1.1 n.s.
Higher/mid-level occupation	0.6*	0.8 n.s.	0.8 n.s.
Blue-collar worker	0.8 n.s.	1.3 n.s.	1.0 n.s.
Has never worked	0.5***	1.2 n.s.	0.8
Time spent in prison			
Less than 2 years (Ref.)	1.0	1.0	1.0 n.s.
2 to 5 years	1.1 n.s.	1.3 n.s.	1.2***
5 years or more	2.3***	2.2***	2.7

n.s. : non-significant (threshold 5%); * p < 0.5; ** p < 0.01; *** p < 0.001.
Source: *HID-prisons* survey 2001.

TABLE 5.— FACTORS INFLUENCING THE PRESENCE OF A HANDICAP AMONG PRISONERS SERVING A SENTENCE OF AT LEAST 5 YEARS (ODDS RATIOS)

	At least one impairment	At least one physical disability	At least one disability
Sex			
Male (Ref.)	1.0	1.0	1.0
Female	0.4 n.s.	1.6 n.s.	1.2 n.s.
Age			
Age 18-29 (Ref.)	1.0	1.0	1.0
Age 30-49	1.2 n.s.	2.2*	1.1 n.s.
Age 50 or over	4.1**	6.8***	1.7 n.s.
SOC			
White-collar worker (Ref.)	1.0	1.0	1.0
Self-employed	0.3**	1.8 n.s.	1.0 n.s.
Higher/mid-level occupation	0.3*	1.4 n.s.	1.0 n.s.
Blue-collar worker	0.5 n.s.	2.4*	1.5 n.s.
Has never worked	0.1***	2.1 n.s.	0.5 n.s.
Time spent in prison			
Less than 2 years (Ref.)	1.0	1.0	1.0
2 to 5 years	1.3 n.s.	1.8 n.s.	2.2*
5 years or more	3.2***	3.0**	5.1***

n.s. : non-significant (threshold 5%); * p < 0.5; ** p < 0.01; *** p < 0.001.
Source: *HID-prisons* survey 2001.

TABLE 6.— PREVALENCE OF HANDICAP BY AGE AND TIME SPENT IN PRISON UNDER CURRENT SENTENCE (%)

	Prisoners aged below 50		Prisoners aged 50 or more	
	Less than 5 years spent in prison	5 years or more spent in prison	Less than 5 years spent in prison	5 years or more spent in prison
At least one impairment	64	77	77	98
At least one physical disability	18	29	37	66
At least one disability	45	64	52	79

Source: HID-prisons survey 2001.

IV. From disability to need of assistance

The *HID* survey questionnaire includes several questions to assess prisoners' need of assistance. Depending on the question used, the results obtained are very different. For each physical disability included in the survey (washing, dressing, eating, using the toilet, transfers/movements, joint mobility/object grasping), two choices of answer ("cannot perform without partial assistance" and "cannot perform without total assistance") provide a means to directly identify a need of assistance related to this disability. A total of 600 persons, — i.e., 1.3% of prisoners — expressed a need of assistance for at least one of the activities listed in the questionnaire. This percentage increases with age, rising from below 0.5% at ages 18-29, to 1% at ages 30-49 and 6% at age 50 or above.

Much higher figures are obtained when the answers to the following question are analysed: "Do you receive all the assistance that you might need as a result of your state of health?" Though almost two-thirds of prisoners answered yes to this question, 23% reported a need of human assistance and 12% a need of equipment. As the question was worded in the conditional, it might have been understood as a question about prison health care in general terms, independently of the actual needs of the person concerned.

Lastly, a third battery of questions was administered in the *VQS* screening questionnaire:

- "Due to health problems, do you need the assistance of another person in your daily life?"
- "Due to health problems, do you regularly use, or do you need, a prosthesis, an assistive device or a technical aid (stick, crutches, artificial limb, wheelchair, hearing aid, etc.)?"
- "Due to health problems, do you need any special adaptations to your cell?"

A total of 3% of prisoners report a need of human assistance due to a health problem, 4% regularly use or need a prosthesis, a technical aid or

an assistive device. Lastly, 4% of prisoners reported that for health reasons, special adaptations to their cell were needed. Most often, these needs concerned a special bed or an individual shower. The populations corresponding to these three types of need do not overlap. Hence, though less than 1% of the prison population combines all three types of need, 8% report at least one. Due to the small numbers concerned, comparison of the three sub-populations would be risky. Their characteristics nevertheless appear to be very similar. The only noticeable difference is a slightly higher proportion of persons with an intellectual or mental impairment among those requiring human help, and slightly more persons with a motor or sensory impairment among those requiring a technical aid or cell adaptations.

Table 7 lists the characteristics of persons reporting a need of assistance in their reply to one of the three questions and compares them with all prisoners and with those reporting a restriction of activity. Slightly more than half of the people reporting a need of assistance are aged between 30-49, an age group that represents 44% of all prisoners. The proportion of inmates reporting a need of assistance who have been in prison for at least five years is slightly higher than among prisoners in general, though no difference in relation to the type of establishment is observed.

Practically all prisoners reporting a need of assistance reported at least one impairment. 81% have at least one disability, 67% a restriction of activity and 27 % an officially recognized level of disability. Motor impairments are particularly over-represented (63% vs. 25% among all prisoners), and the proportion of prisoners with a sensory impairment is also much higher. In terms of physical disability, sensory problems come first (41% vs. 17% for all prisoners), followed by problems of joint mobility and object grasping (27% vs. 6%). Only 36% of persons reporting a need of assistance consider themselves to be in good or very good health, compared with 64% of prisoners in general. All in all, the profile of persons reporting a need of assistance is fairly similar to that of persons with a restriction of activity, though the two populations do not fully overlap. Disability and, even more so, the need of assistance, in whatever form, are much less frequent among persons with restriction of activity. By contrast, the proportion of persons with visceral or metabolic impairments is higher among those with restriction of activity than among those with a need of assistance.

TABLE 7.— MAIN CHARACTERISTICS OF PRISONERS REPORTING
A NEED OF ASSISTANCE (IN %)

	Prisoners		All prisoners
	Reporting a need of assistance	With a restriction of activity	
Age			
Age 18-29	30	34	44
Age 30-49	55	48	44
Age 50 or over	15	18	12
Time spent in prison			
Less than 2 years	56	57	62
5 years or more	23	20	16
Type of establishment			
Remand prison	71	68	71
Detention centre	29	32	29
Type of impairment			
No impairment	1	1	32
Intellectual or mental impairment	67	65	45
Motor impairment	63	54	25
Visceral or metabolic impairment	39	45	20
Visual impairment	17	17	10
Auditory impairment	27	19	11
Speech impairment	11	9	5
Dental problems	8	8	6
Disabilities			
Behaviour/orientation problems	60	54	39
Difficulties washing and/or dressing and/ or eating	10	5	2
Difficulties in using the toilet	8	3	1
Difficulties with transfers and/ or movements	13	11	4
Visual, auditory or speech difficulties	41	30	17
Joint mobility and/ or object grasping difficulties	27	17	6
Restriction of activity	67	100	29
Officially recognized disability level	27	21	8
Perceived state of health			
Good or very good	36	33	64
Fair	37	42	26
Poor or very poor	27	25	10
Need of assistance			
Human assistance needed	38	8	3
Technical aid needed	49	10	4
Cell adaptations needed	45	8	4

Source: HID-prisons survey 2001, VQS-prisons survey 2001.

V. Typology of the prison population

To establish general relationships between the different sets of individual data supplied by the *HID* survey, notably impairments and disabilities by their nature and origin, we performed a multiple correspondence analysis (MCA). Associated with a hierarchical classification, this analysis serves to establish a typology of the prison population. Alongside “standard” socio-demographic variables — age sex, most recent occupation — and the time spent in prison, the active variables of the analysis are the variables characteristic of the “objective” situation of persons with respect to disability (nature and origin of impairments, disability, restriction of activity). The other variables (perceived state of health, officially recognized level of disability, need of assistance assessed by replies to the three questions of the *VQS* questionnaire) which focus on the consequences of this situation of disability, as well as the length of prison sentence and the type of establishment (remand prison/penitentiary centre), closely correlated to the time already spent in prison, are included in the analysis for reference only.

The results are given in Figure 4 and Table 8. Four separate classes were obtained. The first, which includes two in five prisoners, is charac-

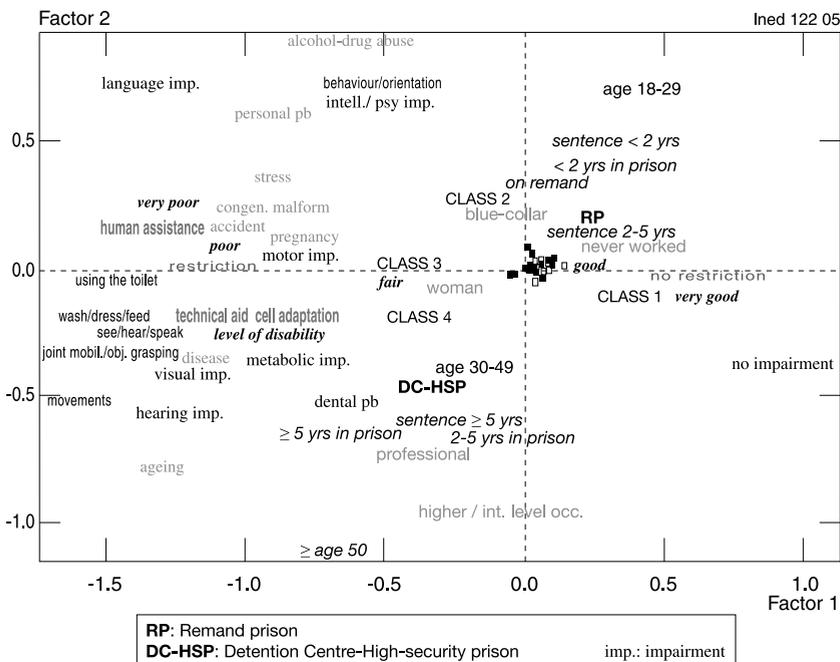


Figure 4. – Scatter plot of the factor analysis
 Source: *HID-prisons* survey 2001, *VQS-prisons* survey 2001.

TABLE 8. – MAIN CHARACTERISTICS OF THE CLASSES RESULTING FROM THE HIERARCHICAL CLASSIFICATION

	Class 1 (42%)	Class 2 (26%)	Class 3 (16%)	Class 4 (16%)	All prisoners
Age					
Age 18-29	51%	61%	28%	15%	44%
Age 30-49	42%	34%	59%	50%	44%
Age 50 or over	7%	5%	13%	35%	12%
Time spent in prison					
Less than 2 years	71%	67%	62%	31%	62%
5 years or more	8%	13%	17%	42%	16%
Type of impairment					
No impairment	77%	0%	0%	0%	32%
Intellectual or mental impairment	2%	98%	62%	55%	45%
Motor impairment	7%	10%	91%	28%	25%
Visceral or metabolic impairment	7%	14%	43%	43%	20%
Visual impairment	2%	5%	11%	35%	10%
Auditory impairment	< 1%	2%	10%	53%	11%
Speech impairment	0%	3%	5%	18%	5%
Dental problems	4%	4%	8%	11%	6%
Cause of impairments					
Disease		16%	45%	61%	24%*
Accident		5%	77%	19%	18%*
Old age		1%	7%	19%	5%*
Personal problems		36%	33%	30%	20%*
Stress		35%	31%	32%	19%*
Alcoholism, drug addiction		13%	8%	5%	5%*
Disabilities					
Behaviour/orientation problems	0%	91%	59%	46%	39%
Difficulties washing and/or dressing and/ or eating	0%	< 1%	8%	2%	2%
Difficulties in using the toilet	0%	< 1%	3%	2%	1%
Difficulties with transfers and/ or movements	0%	0%	20%	2%	4%
Visual, auditory or speech difficulties	1%	7%	17%	77%	17%
Joint mobility and/ or object grasping difficulties	0%	< 1%	33%	3%	6%
Restriction of activity	6%	21%	86%	51%	29%
Officially recognized disability level	1%	4%	24%	14%	8%
Perceived state of health					
Good or very good	83%	66%	30%	45%	64%
Fair	15%	26%	41%	40%	26%
Poor or very poor	2%	8%	29%	15%	10%
Need of assistance					
No need of assistance	98%	93%	74%	86%	92%
Human assistance needed	0%	2%	9%	6%	3%
Technical aid needed	1%	1%	15%	6%	4%
Cell adaptations needed	1%	3%	10%	6%	4%

* This corresponds to prevalences calculated with respect to all prisoners and not to those with an impairment only. This explains the difference with respect to Table 2.

Source: HID-prisons survey 2001, VQS-prisons survey 2001.

teristic of persons with no disability. All persons with no impairments are included in this class, and fewer than one quarter have one impairment. The prevalence of disabilities is practically zero and only 2% of persons in this class reported a need of assistance. A total of 83% (compared with 64% for all prisoners) consider themselves to be in good or even very good health. It is a young group, with half of all members aged under 30. Inmates who have been in prison for less than two years (71% vs. 62%) are also strongly over-represented in this class. The penal status (on remand/convicted) and the length of sentence are close to the average however.

The second class (one prisoner in four) is characteristic of persons with an intellectual or mental impairment (98% of persons in this class) and with an associated behaviour problem or problem of temporal or spatial orientation (91% of persons in the class). Predictably, this impairment is generally attributed to a personal problem (36% of cases), to stress (35%) or to alcohol or drug consumption (13%). The state of health and need of assistance of prisoners in this class are comparable with the average. This is the youngest group (61% aged under 30 vs. 44% for all prisoners). Prisoners serving a sentence of less than two years are slightly over-represented (31% vs. 24%), as are remand prison inmates (77% vs. 70%).

91% of the people in the third group (16% of prisoners) have a motor impairment. Persons with transfer or movement problems are over-represented (20% vs. 4%) and 90% of persons with this type of disability are included in this class. Prisoners with joint mobility and object grasping problems are also over-represented (33% vs. 6%), and likewise for washing, dressing and eating (8% vs. 2%). The two most common causes of these disabilities are accidents (77% of cases) or illness (45%). 62% of the persons in this class (vs. 45% for all prisoners) also have an intellectual or mental impairment, 59% have behaviour and/or orientation problems (vs. 39%) and 43% (vs. 20%) have a visceral or metabolic impairment. It is in this group that the prevalence of restrictions of activity is highest (86% vs. 29%), as is the proportion of prisoners with an officially recognized level of disability (24% vs. 8%) and of those with a need of assistance, of whatever kind (26% vs. 8%). 29% (vs. 10%) of the persons in this class consider that their state of health is poor to very poor. The 30-49 age group is over-represented (59% vs. 44%). The breakdown by time spent in prison, by penal status and, for convicts, by sentence length, is no different from the average however.

The fourth class (also 16% of prisoners) is characteristic of persons with a sensory impairment. 53% (vs. 11%) have an auditory impairment, 35% (vs. 10%) a visual impairment and 18% (vs. 5%) a speech impairment. Three-quarters of the persons in this class have problems seeing, hearing and/or speaking. Many have more than one impairment: 55% also have an intellectual or mental impairment, and 43% have a visceral or metabolic impairment. The most frequently mentioned causes of these impairments are: illness (61% of cases), stress (32%), personal problems

(30%) and old age (19%). The proportion of persons with a restriction of activity, an officially recognized level of disability or a need of assistance, though lower than the previous class, is also very high. The perceived state of health is also slightly less poor. This is the oldest group (35% aged 50 or over). Prisoners previously in senior and middle management occupations are slightly over-represented (13% vs. 9%), while those who have been in prison for more than five years (42% vs. 16%), prisoners with a sentence of five years or more (63% vs. 36%) and prisoners in penitentiary centres (52% vs. 30%) are substantially over-represented. With the ageing of the prison population, the weight of this group, whose need of assistance is high, could grow further in the future.

Conclusion

The *HID-prisons* survey shows that situations of disability are strongly over-represented in the prison population. The difference with respect to the rest of the population is very probably attributable in part to a selection effect at entry into prison. However, within a single age group, the time spent behind bars significantly increases the probability of having a disability.

Consequently, a non-negligible fraction of prisoners report a need of assistance, and this rightfully raises the question of whether these needs are satisfied. Specially adapted cells for disabled prisoners do exist, though their number is very limited. The system of carers should also be developed no doubt (Laplace et al., 2002). Lastly, more attention should perhaps be focused on preventing disability among all populations facing economic insecurity, and prison populations in particular. In this respect, it goes without saying that an improvement in prison living conditions is key to reducing disability among prisoners.

REFERENCES

- BEAUREPAIRE C. de, 1997, "Psychopathologie et détention", *Revue française des affaires sociales*, No. 1, pp. 213-224.
- CAMBOIS E., DÉSESQUELLES A., RAVAUD J.-F., 2003, "The gender disability gap", *Population and Societies*, No. 386.
- COLDEFY M., FAURE P., PRIETO N., 2002, "La santé mentale et le suivi psychiatrique des détenus accueillis par les services médico-psychologiques régionaux", *DREES-Études et résultats*, No. 181.
- COLIN M., JEAN J.-P., 1997, "Droit aux soins et amélioration de la condition des détenus : deux objectifs indissociables", *Revue française des affaires sociales*, No. 1, pp. 17-32.
- DARGENT-PARÉ C., BOURGEOIS D., 2000, "La santé bucco-dentaire", in Leclerc A., Fassin D., Grandjean H., Kaminski M., Lang T. (eds.), *Les inégalités sociales de santé*, éditions La Découverte/INSERM, pp. 267-282.
- DÉSESQUELLES A. and the *HID-prisons* project group, 2002, "Le handicap est plus fréquent en prison qu'à l'extérieur", *Insee première*, No. 854.

- DÉSESQUELLES A., 2003, "L'enquête HID-prisons : bilan d'une enquête particulière", *Courrier des Statistiques*, No. 107, pp. 43-54.
- GUILLONNEAU M., KENSEY A., 1997, "La santé en milieu carcéral – Éléments d'analyse démographique", *Revue française des affaires sociales*, No. 1, pp. 41-60.
- HASSOUN D., 1998, "Précarité et état de santé bucco-dentaire", *Questions d'économie de la santé*, No. 16.
- KENSEY A., CASSAN F., TOULEMON L., 2000, "La prison : un risque plus fort pour les classes populaires", *Cahiers de démographie pénitentiaire*, No. 9.
- KENSEY A., 2001, "Vieillir en prison", *Cahiers de démographie pénitentiaire*, No. 10.
- LALANDE F., 1997, "La santé des détenus et l'état du système de soins avant la réforme", *Revue française des affaires sociales*, No. 1, pp. 61-72.
- LAPLACE L., DANIEL J., BELLONCLE M., ROBERT P.-Y., BOUCHARD I., PEROT A., FAC C., BERNARD B., 2002, "Dépendance pour les actes de la vie quotidienne en milieu carcéral dans la région pénitentiaire Ouest", *Revue d'épidémiologie et de santé publique*, No. 50, pp. 453-461.
- LA ROSA E., 1998, *Santé, précarité, exclusion*, Paris, PUF, 222 p.
- MORMICHE P., 1998, "L'enquête HID de l'Insee – Objectifs et schéma organisationnel", *Courrier des statistiques*, No. 87-88, pp. 7-18.
- MORMICHE P. and the *HID-prisons* project group, 2000, "Le handicap se conjugue au pluriel", *Insee première*, No. 742.
- MOUQUET M.-C. et al., 1999, "La santé à l'entrée en prison en 1997 : un cumul des facteurs de risque", *DREES – Études et résultats*, No. 4.
- OBRECHT O., 1998, "Précarité et prison", in Lebas J., Chauvin P., *Précarité et santé*, Paris, Flammarion, pp. 189-201.
- PARIZOT I., 1998, "Trajectoires sociales et modes de relations aux structures sanitaires", in Lebas J., Chauvin P., *Précarité et santé*, Paris, Flammarion, pp. 33-43.
- PLICHART P., GOLSE A., 1997, "Psychiatrie en prison, une clinique aux limites", *Revue française des affaires sociales*, No. 1, pp. 161-178.
- RAVAUD J.-F., LETOURMY A., VILLE I., 2002, "Identifying the population with disability", *Population-E*, 57(3), pp. 529-552.
- ROCHÈRE B. de la, 2003, "La santé des sans-domicile usagers des services d'aide", *Insee première*, No. 893.
- WHO, 1980, *International Classification of Impairments, Disabilities and Handicaps. A manual of classification relating to the consequences of disease*, Geneva, WHO publications.

DÉSEQUELLES Aline.– Disability in French prisons: how does the situation differ from that of the general population?

In 2001, an extension of the “*HID*” disability and dependency survey was conducted on a sample of almost 1,300 prisoners in France. One prisoner in two has at least one disability. The frequency of mental disability is particularly high. For a similar age and sex structure, the prevalence of physical disabilities is almost three times higher among prisoners than among the general population. This difference is the result of two effects that are difficult to dissociate: a selection effect at entry into prison and a detention effect. For example, among prisoners serving long sentences, after controlling for age, the time already spent in prison is significantly correlated with the presence of disabilities.

Prisoners with disabilities are likely to need assistance, be it human help, technical aids or cell adaptations. 8% of prisoners have such needs. Need of assistance is particularly frequent among prisoners with motor impairments, but also among prisoners who are often older, who all suffer from a sensory impairment and who also often have several types of impairment.

DÉSEQUELLES Aline.– Le handicap en milieu carcéral en France : quelles différences avec la situation en population générale ?

En 2001, une extension de l'enquête Handicaps, incapacités, dépendance (dite *HID*) a été réalisée auprès d'un échantillon de près de 1 300 détenus en France. Un détenu sur deux a au moins une incapacité, et la fréquence des incapacités d'origine psychique apparaît particulièrement élevée. À structure par âge et par sexe similaire, la prévalence des incapacités d'origine physique est près de trois fois plus élevée en milieu carcéral qu'en population générale. Cet écart résulte de deux effets qu'il est difficile de dissocier : un effet de sélection à l'entrée, d'une part, et un effet de la détention, d'autre part. On observe ainsi que parmi les condamnés à de longues peines, après contrôle de l'âge, l'ancienneté de la détention est significativement corrélée à la présence d'incapacités.

Les détenus en situation d'incapacité sont susceptibles d'avoir besoin d'une aide, qu'il s'agisse d'une aide humaine, d'équipements particuliers ou encore d'aménagements dans la cellule. 8 % des détenus sont dans ce cas. La demande d'aide apparaît particulièrement fréquente chez les détenus ayant des déficiences motrices, mais aussi chez des détenus souvent plus âgés, dont le point commun est la présence d'une déficience sensorielle mais qui cumulent souvent plusieurs types de déficiences.