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Women with diabetes in prison: a hidden reality

Globally, it is estimated that more than 740,000 women are incarcerated, representing 6.9% of the total prison population worldwide (1). In Spain, this proportion rises to 7.3%—roughly 12 men for every woman in prison—one of the highest rates in Western Europe (2). Chronic diseases, including diabetes, tend to develop or worsen during incarceration due to factors such as sedentary lifestyle, obesity, mental illness, psychotropic drug use, and aging (2).

"When people talk about women, they don't talk about women in prison; when they talk about people in prison, they don't talk about women."

Studies on the prevalence of diabetes in prisons are very limited, so it remains unknown how many incarcerated women have diabetes, as such data are not publicly available.

A 2023 study conducted in Catalonia found that 5% of the prison population had type 2 diabetes mellitus. However, these data were not disaggregated by sex, underscoring the need for research that makes visible the presence of diabetes among incarcerated women and explores how they experience this health condition (3). Therefore, the American Diabetes Association (ADA) emphasized in 2024 that people with diabetes in detention centers must receive equal treatment and access to care equivalent to that provided in the community (4).

In Spain, the prison system is largely designed to serve men, as they represent the majority: only 3 prisons are exclusively for women (in Madrid, Ávila, and Barcelona), and most women are housed in modules within male prisons (5). In 2024, the National Mechanism for the Prevention of Torture (MNPT) urged the creation of computer systems capable of collecting and analyzing sex-disaggregated health data to ensure true equality of rights (2). However, access to such data remains difficult.

Incarcerated women face numerous social and emotional barriers: discrimination, lack of gender-specific resources, and separation from family and support networks. Diabetes affects them differently due to both clinical and social characteristics: average age of 42, high rates of gender-based violence (~88%), lower educational attainment, caregiving roles, and mental health disorders diagnosed in up to 42% of cases (11).

THE PRISON CONTEXT:
Structures that render women invisible

In Spain, prison healthcare is managed by the Ministry of the Interior, separate from the National Health System (NHS)—except in Catalonia, the Basque Country, and Navarra.

This separation reinforces staff turnover, disrupts continuity of care, and reduces clinical quality (3). Referring to an inmate as a "person with diabetes" is not enough if the measures implemented lack sexand gender-sensitive approaches. Institutional design also contributes to invisibility. As noted, with only 3 women's prisons and most women held in isolated modules within male facilities, geographical isolation and disconnection from family are common.

This, along with inadequate medical care—such as when transfers depend on security rather than health criteria—further undermines their wellbeing (5). The MNPT has repeatedly warned of the urgent need to incorporate sex and reproductive health variables in prison databases to align public policy with the real context of female inmates (2). Without such records, planning and resource allocation cannot meet their specific needs.

DIABETES AND GENDER:
The intersection of vulnerability

Women with diabetes in prison require an individualized clinical approach that considers the particularities of their life cycle—from menarche to menopause—including pregnancy, breastfeeding, and contraceptive use. Care must go beyond glycemic control to include a comprehensive health assessment and thorough physical examination, paying special attention to skin integrity, distal pulses, and signs of peripheral neuropathy (4).

To the inherent clinical complexity of diabetes, one must add a psychosocially adverse environment. A high percentage of incarcerated women have experienced violence (up to 88%), and between 42% and 64% show symptoms of anxiety or depression, often requiring psychotropic medication. This emotional burden not only increases vulnerability but also undermines treatment adherence and overall health.

The ADA advocates for an integrated model of care encompassing education, nutrition, monitoring, and self-management within an interdisciplinary framework. Continuity in medication administration, adherence to nutritional goals, and promotion of physical activity should be guaranteed from the moment of incarceration, without interruptions (4). Upon entry, a plan should be established to achieve near-normal glycemic control (target HbA1c < 7%, adjusted to the individual). Staff must be trained to recognize and manage hypoand hyperglycemia—including the use of glucagon—and to identify women at risk for diabetic kidney disease (4). Pregnant women, those with type 1 diabetes mellitus, or with a past medical history of ketoacidosis or severe hypoglycemia should receive intensive care, including teleconsultations with NHS diabetes specialists (11). Even in settings where technology is limited, evidence shows that access to Continuous Glucose Monitoring (CGM) can reduce HbA1c by 0.6% and prevent acute complications such as hypoglycemia (8).

ORAL HEALTH:
A neglected dimension

Oral health is closely associated with diabetes and overall wellbeing; however, access to dental care among incarcerated populations is extremely limited. In Spain, chronic diseases such as diabetes increase the risk of caries and periodontal disease, conditions that often go untreated since emergency dental care is prioritized over prevention (9). A recent study found that incarcerated women experience significant dental problems associated with low education levels, smoking, poor diet, and limited dental care access (7). Untreated oral infections can »

GEOGRAPHICAL ISOLATION AND LOSS OF FAMILY TIES ARE COMPOUNDED BY INADEQUATE MEDICAL CARE, AS SHOWN WHEN PRISON AUTHORITIES STATE THAT TRANSFERS BETWEEN UNITS DEPEND MORE ON SECURITY CRITERIA THAN ON HEALTH NEEDS

worsen glycemic control and overall health, making oral health a critical yet neglected component of legal and medical care. Implementing preventive programs, educational campaigns, and access to basic dental care under protocols that recognize the link between oral health and chronic diseases—particularly diabetes—is essential for equitable healthcare.

BREASTFEEDING IN PRISON: A right and an act of care

Women's prisons and the situation of incarcerated women in Spain have not been thoroughly studied until the late 1980s, leaving significant gaps in research. While breastfeeding has been explored within broader discussions of motherhood and childcare, there is very limited research on breastfeeding in Spanish prisons, unlike studies from Brazil and the United States (10). Again, data are lacking in the Spanish setting. A study conducted in the United States found that only a small number of prisons allow mothers to breastfeed or express milk, and often only within medical units (9). In Brazil, recent analyses revealed that women giving birth in prison receive individualized breastfeeding guidance and early follow-up by medical and nursing staff (10).

However, upon release, coordination between prison and community health services is often lacking, interrupting continuity of care (9).

PROPOSALS FOR GENDER-SENSITIVE PRISON HEALTH CARE

To address this reality, research must first be conducted in this population to make diabetes prevalence and other health conditions visible, along with the following actions:

a) **Full health care integration:**

Prison health care should function as a continuous, integrated process where medical data from the NHS and prison institutions are interconnected. This would enable shared access to health records, ensuring more efficient, safe, and coordinated care. Developing specific protocols, assigning qualified staff, and creating training programs focused on women's health in prisons —especially in diabetes, oral health, and mental health—is essential.

b) **Gender-sensitive digital records:**

Databases should include variables such as menarche, menopause, gestational diabetes, breastfeeding, oral and mental health, and risk factors, in accordance with MNPT recommendations.

c) **Structured clinical care:**

With screening, therapeutic education, tailored nutrition, physical activity, and access to technology—such as CGM—for effective diabetes management.

d) **Protected oral health:**

Preventive campaigns, access to dental hygienists, treatments, and education programs linked to diabetes control.

e) **Support for breastfeeding as a right:**

Encouraged within prisons through permission for milk expression, suitable facilities, equipment, and coordination with external health services to ensure continuity.

f) **Strengthened mental health services:**

With psychologists, psychiatrists, and new tools for suicide prevention and emotional care. D

CONCLUSIONS

Both prisons and much of the research about them are structured around a supposedly "gender-neutral" model that, in practice, assumes a male default. "Prisons continue to adopt universal, falsely masculine patterns, discriminating against and punishing women for being women—thus perpetuating their social subordination" (10). The intersection of being a woman, living with diabetes, and being incarcerated creates a space of profound vulnerability, where health—biological, emotional, and social—is threatened from multiple fronts.

The ADA demands healthc are equivalent to that of the free population (4). Translating that requirement into the prison setting means transforming a traditionally gender-blind model into one that is sensitive, intersectional, and effective. This transformation involves recognizing, making visible, and acting upon realities such as the right to health, motherhood, and oral care.

Only by doing so can incarceration become an opportunity for protection and health education, helping shape a prison system that is more just, equitable, and humane.

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