

---

# LETTERS TO THE EDITOR

---

Regarding the article:

## EVOLUTION OF THE NEED AND COVERAGE OF OPIOID SUBSTITUTION TREATMENTS AND NEEDLE EXCHANGE PROGRAMMES IN SPANISH PRISONS, 1992-2009

Dear respected Editorial Board,

With regard to the article "*Evolution of the need and coverage of opioid substitution treatments and needle exchange programmes in Spanish prisons, 1992-2009*" recently published in the Spanish Journal of Prison Health (RESP in Spanish), I would like to point out some of the ideas it contains and clarify some of the aspects concerning determined references to previous articles in which I have taken part, some of which have been published in this same Journal.

First I must note that the work by Mr. L. de la Fuente contains theoretical models, on which I lack epidemiological preparation to have an opinion on, what's more I have difficulty in understanding the essence of what they try to prove.

However, I do identify some statements with which I strongly disagree:

### 1. Regarding the delay in the taking of measures in the prison environment

The study states that: "*The first relevant result is the enormous delay with which such measures were implemented: between 8 and 25 years*". "*However, the time when more users could have benefited from such programs is not the time when more benefit could have been obtained. It is obvious that even then a great deal of such users had already been infected by HIV. Therefore, from the point of view of preventing such infection, it is undeniable that 1985 (highest incidence of the infection among users) was an utmost important reference point*".

In the context of the initiation of preventive measures regarding the AIDS pandemic the first issue that must be noted is that as far as HIV prevention is concerned, both inside and outside prison, both in Western and developing countries, nothing was

done on the right time. When finally in 1985 tests for the identification of antibodies against the virus were available, two out of every three drug users were already infected. Hence, the theoretically ideal time for initiating preventive measures was before this date.

The implementation of needle exchange programmes was also delayed (as in the community) but it must also be noted that the first needle exchange program in Europe, and probably worldwide, was initiated in Hildenbank (Switzerland) in June 1994. In our country, the program's design at Basauri was initiated one year and a half later, in December 1995, and was practically enforced in July 1997. We must not forget that some difficulties had to be overcome during the preparation, among which the fact that syringes were regarded as illegal objects within prisons due to their potential use as weapons must be underlined.

We should also remark that the experience was generalized shortly after in most of the Spanish prisons. We must also remember that such programs have not yet been initiated and won't be in most of the European facilities, not to mention in the rest of the world.

### 2. Regarding the coverage of NEP

The study states that: "*The decline of NEP coverage in recent years is a cause of major concern for the evolution of HIV and Hepatitis C epidemics*". "*Moreover, the substantial decrease in coverage observed throughout recent years is a consequence of a reduction in provision*". "*Now, the reduction by half in the provision that has taken place between 2007 and 2008 does not seem justified by a simultaneous reduction of need due to a reduction of the number of injectors, as it has been suggested*". "*The general perception that injection is no longer a problem may be leading to*

*the fact that NEP are currently starting to disappear and that the inmates' theoretical right to requesting syringes to health staff members is not being exercised. As so often happens, less priority in any issue can lead to a poorer provision of care for those who still suffer such problem. This situation could be encouraged by a service whose instauration was obviously a social and public health conquest, but whose exercise certainly still faces enormous reluctance”.*

*“Nevertheless, the evidence collected on the efficacy of such measures in the community is already broad, both for OST and NEP”.*

Information available suggests that both inside and outside prisons, both regarding the provision and exchange of needles, in our country as well as in others, the use of syringes is collapsing. And by suggesting that in prisons (and not in the community) this could be due to a lower provision is a gratuitous and unsustainable statement, especially if considering a specific year: 2007-2008. This could have happened with the implementation of programs in 1997 but with already consolidated programs this does not seem so.

### 3. Regarding the effectiveness of programs

The study states that: *“Such a temporal coincidence and probably the impatience to show the efficacy of a series of policies which were very hard to implement in the first place, have led to suggesting a somewhat rushed, or at least poorly clarified, casual relationship”.*

Preventive programs (methadone, needle exchange) enabled habit modification. By stating that outside prisons it has been proved that these programs were efficient and not inside seems incongruous, all the more when a progressive reduction of HIV and HCV infection rates has been observed within prisons and in view of the fact that in 2010 there were no

sero-conversions to HIV in Spanish prisons. Even the WHO in 2005 pointed out the evidence on the cause and effect relationship between the implementation of NEP in prisons and the reduction of HIV infection among inmates<sup>1</sup>.

### 4. Regarding the methodology used to establish the theoretical model

The paper assumes that one sterile syringe is used per injection and therefore estimates that the maximum needs belongs to 1992, when 377,529 needles would have been needed. Nevertheless, the provision of needles was implemented five years later and in the year with a higher coverage rate (2005), only one out of every five needed needles was provided.

If all need related estimations have been made on the basis of *“one sterile syringe per injection”*, I believe that the conclusions derived from it are invalidated. Both inside and outside prisons, needles are frequently reused several times even if they are not shared. The estimation in prison is that each injector uses his *“personal needle”* between 4 and 5 times before changing it.

**Jose Manuel Arroyo Cobo**

General Deputy Director of Prison Health  
Secretary General of Penitentiary Institutions

### BIBLIOGRAPHICAL REFERENCE

1. Gatherer, A. Moller L. Hayton P. The World Health Organization European Health in Prisons Project After 10 Years.: Persistent Barriers and Achievements. American Journal of Public Health . October 2005. Vol 96 n° 10

Dear respected Editorial Board,

With regard to the article "*Evolution of the need and coverage of opioid substitution treatments and needle exchange programmes in Spanish prisons, 1992-2009*" I want to point out what I believe to be some methodological and calculation errors regarding the coverage of needle exchange programs, which once corrected would alter the results and therefore the discussion. I would appreciate if you could forward this letter to the authors so that they could accept this letter and correct these mistakes.

### **1.Regarding the estimation of needle need in prison**

As to calculate the need of syringes in prison (SN) during one year the whole number of inmates hosted in the prison at some point during that year has been considered, as if all had stayed for the whole year in prison, something which obviously does not depict the real situation. Let's take 2006 as an example: the estimated need is of 99,973 needles by the number of people hosted in prison in 2006 (93,112) by the prevalence of injecting drug users during the last 30 days in prison (0.013) by the average number of injecting days per year and user (82.4). I do believe that the daily mean of people in prison should have been used (55.049) which is the figure to better depict the number of people to whom services must be provided in a daily basis throughout the year: regarding food (100%) or needle provision (1.3%). If we recalculate the estimation through the authors' methodology the estimated need of needles is 58,968 and coverage goes from 20.7% to 35%.

### **2. Regarding the estimation of needle need in prison for 2007, 2008 and 2009**

The authors estimate the data after 2006 through a projection of data, based on previous years, in which the stable trend observed in the prevalence of injecting drug users for 30 days before and upon imprisonment is kept since no information is available on those years. Prison health care professionals who carry out medical examination upon imprisonment and collect information on risk factors have observed a considerable reduction in the prevalence of

injecting drug users from 2006 (11.3%) until 2011 (4.4%) in prisons run by the Secretary General of Penitentiary Institutions (SGPI) (Spain, except for Catalonia). Moreover, both professionals and NGOs which have managed totally consolidated NEP in their corresponding prisons, have also reported a reduction of the prevalence of IDU- so that currently it has been estimated at 0.4% in SCPI prisons, one third of that observed in 2006 (1.3%) and hence, an important reduction in the demand and the provision of needles. Through the projection of this data and the aforementioned correction, the coverage of needles is hardly altered so that it would be imprecise to state that there has been: "*a substantial decrease in coverage observed throughout recent years as a consequence of a reduction in provision*" as well as to make any conclusions derived from this idea. The upcoming publication by the National Plan on Drugs of the 2011 Survey on health and drug use among the imprisoned population will shed some light on this issue.

Apart from what has been stated before, I believe that process indicators are very interesting to assess the evolution of the implementation of individual programs. But as to assess the effectiveness of a group of measures, which would include the coverage and efficacy of antiretroviral therapies, the provision of condoms and lubricant and Health Education programs (especially health mediation services), the control of the HIV and hepatitis C pandemic, I prefer outcome indicators. In SGPI dependant prisons computerized information regarding HIV and HCV tests is gathered every six months. All yearly seroconversions are thoroughly analyzed so that the incidence of new HIV and HCV cases- which may have been spread in prison- can be established. Last in 2010, after a continuous reduction since 2000 there were no seroconversions among SGPI inmates during their stay in prison. This is the "added value" of prison health care to the control of the HIV and HCV epidemics in the Community: to avoid the transmission of these diseases during imprisonment. This has been internationally acknowledged by WHO and UNODC experts.

Yours sincerely,

**Enrique J. Acín García**  
Head of the Area of Public Health  
General Sub-Directorate on Coordination  
of Prison Health Secretary General  
of Penitentiary Institutions.

**In response to the letters:**

## **EVOLUTION OF THE NEED AND COVERAGE OF OPIOID SUBSTITUTION TREATMENTS AND NEEDLE EXCHANGE PROGRAMMES IN SPANISH PRISONS, 1992-2009**

Dear respected editorial Board:

We would like to reply here to the two letters which point out some of the aspects of our article 1 on the evolution of the need and coverage of opioid substitution treatments and needle exchange programs in Spanish prisons. Both letters come from representatives of the General Sub-Directorate of Penitentiary Institutions.

The letter by Mr. Enrique J. Acín raises two different matters. The first regards the population used for the estimation of the need of needles. We believe that his remark is completely right. Therefore, a new estimation including this approach has been carried out and will be presented in this same number of the Journal <sup>2</sup>. The second matter raises further controversy, as we state in the paper with the new estimation.

With regard to the four comments raised by the letter of Mr. José Manuel Arroyo, we wanted to point out that three of them make reference to our discussion and hence are obviously unrelated to the results but rather to differences concerning their assessment. Obviously results are the most relevant aspect in any research since all readers will make their own assessment depending of many criteria among which it is not easy to neglect the institutional responsibility of who's making the assessment. Anyway, we would like to reply each of his comments.

### **1. Regarding the delay in the taking of measures in the prison environment**

How the text has been selected in his letter can lead to misunderstanding. It seems that a long paragraph is being literally transcribed “*The first relevant result is the enormous delay with which such measures were implemented: between 8 and 25 years*”. “*However, the time*) Nevertheless, this is not so. The first sentence has been cut down, and the original includes a subtle but considerable nuance: “*between 8 and 25 years, according to evolution indicators of the epidemics of heroin abuse or of need, and the provision*

*indicators used in the comparison*”. The original includes another 8 lines before the section which is included next in the letter. Although quoting marks are indeed used it is not easy for the reader to assume that there is text in between, since it is not the most common way of doing so. The mark (.) should have been used. Honestly we believe that it does not seem easier to play down the matter.

The whole explanation which follows is a justification or explanation of the reasons for such delay and of the pioneering role of the Spanish prison health system in the development of these programs. We can share his opinion. But we believe that the fact that most of the countries have done so worse or later, or that they have not even approached the implementation of such programs may be an attenuating circumstance but never a ground for exemption.

### **2. Regarding the coverage of NEP**

In short we make reference to our revised estimation 2, where we include what we believe to be substantial analysis regarding what the author of the letters defines as a “*gratuitous and unsustainable statement*”. In summary we will say that what is not supported by scientific evidence is the statement that the “*use of syringes is collapsing*”. It has been thoroughly researched that the reduction of injection in Spain is a continuous process which began in the 80s <sup>3-5</sup>. There is no evidence of collapse or free falling. On the other hand, there is a reduction of the reduction speed of the number of IDU (or the prevalence of injection) throughout recent years. Moreover, such phenomena do not usually cease so radically.

Nevertheless, a reduction by one third during 2007 does seem explicable by a reduced provision, which may not necessarily run parallel to a reduction in need. In 2005 the maximum provision was achieved, in 2006 the reduction was slighter and later years experienced a progressive reduction alike the one of 2006-2006. That is, the trend is abruptly altered in 2007. It is not extremely risky to assume that probably such reduction in provision has not been

generalized but due to specific penitentiary facilities, where probably it has never recovered.

### 3. Regarding the effectiveness of programs

The oldest among us are known for having defended the development of harm reduction programs in all fields, including prisons, from the beginning of the story we are telling. Therefore, we are less susceptible to any bias regarding the undervaluation of any evidence on their effectiveness. The letter includes a critical remark on the assumption of cause effect relationship between the development of these programs in prison and the descending trend of some indicators on HIV and HCV included in another paper <sup>6</sup>. We still believe that this trend may not be interpreted as a result of the development of such programs without previously introducing some precaution, on the basis of two main reasons. First, because all indicators are based on rates which consider the overall imprisoned population. By knowing the continuous reduction in the percentage of injecting drug users in prison (a fact which is repeatedly stressed in both letters) some indicators could show a similar trend (maybe slighter), even if the incidence of HIV or HCV among IDUs was the same. Second, because the description of the prevalence trend concerning such infections among the imprisoned population is mainly due to what has happened to such population outside prison. Incidence trends may be more valuable, but all denominators should only include IDUs not the whole imprisoned population. It is not difficult to assume that prison health care policies would have entailed positive results, but such results would have a low level of evidence to establish a causal relationship such as the one assumed throughout the original. These are some of the reasons, but we include a longer and thorough discussion in our article.

We also believe that we should be cautious when stating that no HIV seroconversions have taken place in Spanish prisons. We believe that the correct thing to say is that information systems have not reported any. As far as we know there is no periodic HIV test among inmates while in prison or upon release, and by no means during the window period. It excellent news but a scientific Journal must include the appropriate nuances.

Last, the article referenced in the letter in support of his hypothesis on the proven effectiveness of programs in prison <sup>7</sup>, contains a generic statement on this regard but has no systematization or evidence analysis and refers to a WHO position report which neither does. There are several reasons to support these

programs (human rights, the lack of adverse effects which were first thought of, etc.) but we believe that the quality of existing evidence on their effectiveness is very poor and derived from low quality studies, mainly because the complexity of gathering such information and because no powerful studies have ever been designed to that end. A critical analysis of a more recent revision, published in an acknowledged journal may lead to the same conclusion. We would really like to have consolidated evidence, as we stated in the paragraph cited by the letter's author: *"This situation could be encouraged by a service whose instauration was obviously a social and public health conquest, but whose exercise certainly still faces enormous reluctance"*. Obviously the number and quality of research carried out outside prison is superior although there is also important deficit.

### 4. Regarding the calculation methodology

The remark that on the acknowledged fact that needles are reused conclusions are therefore invalidated seems difficult to support. However, we believe that reuse entails an evidence of insufficient provision. All needle exchange programs have always aimed one needle per injection so that they are not shared nor reused although such objective seems difficult to achieve and the main issue is that they are not shared. We assumed one needle per injection and day which actually implies a lower level of exigency than one needle per injection.

**Luis de la Fuente  
María J. Bravo  
Eladio Jiménez-Mejías  
Luis Sordo  
José Pulido  
Gregorio Barrio**

### BIBLIOGRAPHICAL REFERENCE

1. de la Fuente L, Bravo MJ, Jimenez-Mejias E, Sordo L, Pulido J, Barrio G. Evolución de la necesidad y cobertura de los programas de tratamiento con sustitutivos opioides e intercambio de jeringuillas en la prisiones españolas, 1992-2009. Rev Esp Sanid Penit. 2012; 14: 37-47.
2. de la Fuente L, Bravo MJ, Jimenez-Mejias E, Sordo L, Pulido J, Barrio G. Evolución de la necesidad y cobertura de los programas de intercambio de jeringuillas en la prisiones españolas, 1992-2009. Una estimación corregida. Rev Esp Sanid Penit. 2012; 14: 86-90.

3. de la Fuente L, Barrio G, Vicente J, Bravo MJ, Lardelli P. Intravenous administration among heroin users having treatment in Spain. *Int J Epidemiol.* 1994; 23: 805-11.
4. de la Fuente L, Barrio G, Royuela L, Bravo MJ, The Spanish Group for the Study of the Route of Heroin Administration. The transition from injecting to smoking heroin in three Spanish cities. *Addiction.* 1997; 92: 1749-63.
5. de la Fuente L, Lardelli P, Barrio G, Vicente J, Luna J. Declining prevalence of injecting as main route of administration among heroin users treated in Spain, 1991-1993. *Eur J Public Health.* 1997; 7: 421-6.
6. Hernández-Fernández T, Arroyo-Cobo JM. Results of the Spanish experience: A comprehensive approach to HIV and HCV in prisons. *Rev Esp Sanid Penit.* 2010; 12: 86-90.
7. Gatherer A, Moller L, Hayton P. The World Health Organization European Health in Prisons Project after 10 years: persistent barriers and achievements. *Am J Public Health.* 2005; 95: 1696-700.