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 [2]. 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 [3-5]. 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 [6]. 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 7, 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.

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