

Health education for prevalent problems in prison, Ocaña-I proyect (Spain)

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ABSTRACT

Objective: Pilot project focusing on the implementation and evaluation of a health education (HE) program for inmates of the prison of Ocaña I (Spain). The objective was to analyze the intentions for change in health habits and perceptions, and to assess whether the HE-program had differential effects depending on whether the participants belonged to the PAIEM or not and their socio-demographic characteristics.

Methodology: The participants were 65 men, who answered an ad hoc questionnaire at the end of each session. Data analysis applied was univariate and bivariate (one-way ANOVA, t-test for Equality of Means and Chi-Square test).

Results: The average rating of the sessions was 3.51 out of 4 ($SD = 0.62$). The percentage of positive answers about the intention to adopt healthy habits was higher among non-PAIEM subjects (84.8%) than among those who were part of this program (57.9%). All subjects having a couple indicated an intention to change negative habits, compared to 67.3% for those without a couple. The percentage of subjects who said that their perception on the issue had changed was highest among those without education (89.7%) than among those with education (61.5%).

Conclusions: The evaluation of implanted HE-program implemented in the Ocaña I prison was very positive, there are differences between subjects belonging to the PAIEM and those who do not.

Keywords: health education; prisons; community health services; program evaluation; habits; perception; mental health; Spain.

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INTRODUCTION

The main aim of Health Education relies in promoting lifestyles leading to an increased level of health and welfare and, to that effect, it can be a valuable therapeutic tool within the correctional environment¹. Education is also a right within prisons², as well as the right to health, both of which should not be threatened due to the deprivation of liberty³.

Inmates in prisons are exposed to a series of psychosocial, physical and environmental factors which set them on a vulnerable and very different position than that of the general population⁴, thus comparing health promotion strategies aimed at the general population are not comparable. This is a population with specific features on which several

psychosocial factors have had an impact. Two of these main features are the widespread lack of education and a state of health significantly poorer than that of the general population⁵.

When discussing inmates' health problems, often reference is made to pathological conditions completely overlooking health-determinant environmental and social conditions⁶. A strong correlation between poverty, social exclusion and health inequalities has been confirmed⁷.

Among the most common health problems within correctional facilities we can underline drug abuse and infections associated to parenteral drug use, a lack of hygienic habits, exposal to continuing stress inherent to their criminal and correctional situation, mental health issues and inappropriate or lack of use

of healthcare services⁵, as well as external circumstances which have a greater impact due to the deprivation of liberty⁸ in an environment where there is a lack of hope and a prevalence of anxiety, depression and community conflicts⁹. This special nature calls for a different approach¹⁰.

There is shortage of scientific literature on health promotion strategies within correctional facilities in Spain. Nevertheless, we found a study carried out in 2009¹⁰ which positively assessed a health promotion strategy among diabetic patients and a high commitment rate regarding similar future interventions. Internationally, this type of strategies is arising¹¹.

Nowadays we understand that socio-educational interventions must be based on a participatory model, and Public Health aims all its approaches at community participation, equity and the reduction of health inequalities¹³. This is why the approach of health promotion in prisons is a good example of actions aimed at the reduction of the aforementioned inequalities. This should be done based on personal abilities and aimed at overcoming social barriers¹⁴.

The demand for health care in prisons is between three and eight times higher than outside prison³ and one in every two inmates suffers from some kind of chronic condition¹⁵. Therefore, the Spanish correctional system counts upon healthcare department within facilities supported by several psychosocial programs²⁴ among which it is worth noting the Comprehensive Care Program for Mental Patients (PAIEM in Spanish)¹⁶. Mental health disorders entail a serious Public Health issue within prisons¹⁷: anxiety and depression are the most prevalent disorders¹⁸. Other highly prevalent conditions, aside drug abuse, are communicable diseases such as the infection by HIV, hepatitis C¹⁹ and tuberculosis²⁰. This is why health promotion strategies aimed at the prevention of this kind of diseases are crucial.

Imprisonment should entail several advantages for health, based on stability, schedule control, limitation of alcohol and drug use and access to healthcare providers²¹. Screening and early diagnosis of several diseases is carried out in these facilities, something which implies a good opportunity to treat people who otherwise would remain undiagnosed or untreated²². In fact, sometimes for inmates prisons are entry points to the National Health System.

On the other hand, the correctional system can also be the source of multiple adverse health effects, both physical and mental²¹. Yet we must consider imprisonment as an opportunity and a strategic environment to detect health problems and try to reduce risk behaviors among this vulnerable population²³.

From the Spanish correctional system a real awareness for promoting services aimed at improving inmates' quality of life, including an improved healthcare and an approach aimed at their future release²⁴ has been noted. A fact, which underlines the need for educational interventions aimed at promoting and keeping healthy behaviors and habits, as well as the appropriate use of preventive and health care services⁵.

Due to these facts, a selected team of teachers from the Faculty of Nursing of the University of Castilla-La Mancha designed together with the medical sub-directorate of the Correctional Facility of Ocaña I a Health Education project aimed at inmates, with eventual evaluation.

The main objectives of this study were the following: 1) to analyze change intentions regarding health habits and the perception of consequence of the implemented Health Education program; 2) to assess whether the program had a significant effect among individuals included in PAIEM and those not included; and 3) to analyze whether socio-demographic features (age, level of education, marital status) played a role in change intentions regarding habits and their perception after the implementation of the Health Education program.

METHODS

Description of the health education program

The contents discussed in the sessions included several aspects of Health Education. They were previously established by the department of Nursing Academic Coordination of the University and the medical direction of the correctional facility, as part of a comprehensive approach of the more prevalent health issues of the imprisoned population. Table 1 depicts the contents of each session, the number of participants and the assessment of each session.

Inmates were divided in two groups, according to whether they were included in PAIEM or not, as to adapt the contents of sessions to the needs of different receptors. The decision was based on the fact that inmates included in PAIEM, diagnosed of a mental disorder, presented a series of features such as impaired functional capacities for the development of daily tasks, greater vulnerability to stress and poorer physical health²⁵. The contents of sessions aimed at PAIEM inmates were treatment adherence, stress adaptation and tolerance, hygiene and self-care and protection of sleep. On the other hand, the contents of sessions

aimed at inmates not included in PAIEM were tuberculosis, sexually transmitted diseases, healthy diet and physical activity.

All sessions were held in the correctional facility of Ocaña I, they had an approximate duration of 50 minutes and were carried out by nursing students (under the supervision of teachers and medical and nursing staff of the facility). The sessions were lead in a dynamic and participatory way supported by audio-visual material.

Participants

Participants included 65 males of age imprisoned in the correctional facility of Ocaña I. the selection of individuals was randomly made by medical and nursing staff of the facility.

Measuring instruments

At the end of each session an evaluation was made by means of an anonymous ad-hoc designed questionnaire. It included five dichotomous reply questions (YES/NO) where the participants were asked to say whether they had the intention to change their negative habits, they were going to adopt positive habits, their opinion on the issue had changed, they had discovered new information and they felt well informed. Moreover, the questionnaire also included a question regarding the assessment of the session where participants were asked to tell their degree of satisfactions by means of a four-point Likert scale (1= "Unsatisfied"; 2= "Poorly satisfied"; 3= "Satisfied"; 4= "Very satisfied").

Ethical aspects

Authorization for the development of this study was sought by the Direction of the Correctional Facility Ocaña I, according to the legal terms included in Act 7/99 on "Studies and research carried out in the correctional environment". All participants were requested informed consent. Data collection was carried out by those responsible for educational sessions. Data was been treated anonymously and confidentially.

Statistical analysis

Univariate (descriptive statistics and frequencies) and bivariate (one factor ANOVA, *t* Test and square-Chi independence test) analysis were carried out.

Measuring the effect size of one-factor ANOVA and *t* test was done by means of η^2 . Statistical software in all analysis was IBM® SPSS® Statistics 19.0.

RESULTS

Regarding the features of participants it is worth noting that 29.2% were included in PAIEM and the remaining 70.8% were not. According to age 16.9% were between 18 and 29 years old; 24.6% between 30 and 39; 26.2% between 40 and 49 and 32.3% were over 50 years old. Regarding to the level of education only 40% reported having completed some kind of education (at least Primary Education) while 38.5% reported having basic yet incomplete education (no School Graduate nor Compulsory Secondary Education) and 21.5% had not completed any type of education. In relation to marital status, the vast majority (75.4%) were single, separated or divorced while 24.6% reported being married or having stable partners.

As we can see, after Health Education sessions, three out of every four individuals had the intention to change their negative habits and adopt positive habits (Figure 1). The lower percentage of positive answers was regarding the question of whether they had discovered new information (64.6%).

The overall evaluation of sessions was very positive ($M = 3.51$, $SD = 0.62$). In fact, 55.4% reported feeling very satisfied and 41.5% satisfied while only 3.1% chose the "Poorly satisfied" or "Unsatisfied" options. The valuation analysis according to the type of educational session the individual had attended did not reveal statistically significant differences ($F = 0.99$; $p = 0.44$; $\eta^2 = 0.11$). There were not significant differences in the valuation of sessions according to whether it was PAIEM individuals ($M = 3.32$) or not-PAIEM ($M = 3.59$) ($t = -1.34$; $p = 0.19$; $\eta^2 = 0.04$); their age: under 40 years old ($M = 3.67$) versus 40 years or older ($M = 3.39$) ($t = 1.78$; $p = 0.08$; $\eta^2 = 0.05$); their marital status: no partner ($M = 3.47$) versus partner $M = 3.63$) ($t = -0.88$; $p = 0.38$; $\eta^2 = 0.01$); or their educational level: no education ($M = 3.59$) versus education ($M = 3.38$) ($t = 1.32$; $p = 0.19$; $\eta^2 = 0.03$).

Then it was assessed whether the Health Education program had an impact on the intention of change regarding health habits and the perception among PAIEM and not-PAIEM individuals. As depicted in Table 2 there was only an association between being PAIEM or not-PAIEM and the percentage of affirmative answers to questions regarding the intention of adopting healthy habits ($p = 0.04$) and the change of perception on the issue ($p = 0.02$). After group sessions,

Table 1. Health education sessions. Contents and participation.

| Sesión | Contents | Frequency | % | Valuation M (SD) |
|------------------------------------|--|-----------|------|------------------|
| Tuberculosis | What is tuberculosis Magnitude of the issue Disease in prison Infection and transmission Risks. Prophylaxis and prevention. Treatment Mantoux. Control of TBC. | 14 | 21.5 | 3.64 (0.50) |
| Sexually transmitted diseases | Sexually transmitted diseases. Gonorrhoea, Syphilis, AIDS, others. Population at risk Clinical syndromes How to prevent them. Prophylaxis. Reducing the risk. Importance of communication. | 10 | 15.4 | 3.80 (0.42) |
| Healthy diet | Food and groups. Nutritional needs. Habits in prison Main meals Recommendations on a healthy diet | 9 | 13.8 | 3.56 (0.53) |
| Adaptation and tolerance to stress | What is stress Examples in prison Motivation and adaptation Horizons and individual goals Healthy recommendations | 5 | 7.7 | 3.40 (0.89) |
| Hygiene and self-care | What is self-care Lack of self-care. Associated factors. Hygiene, bath and daily activities. Risk of infection. Everyday recommendations | 5 | 7.7 | 3.20 (0.45) |
| Protection of sleep | Sleep as a physiological need. Sleep phases. Why do we have to sleep? Metabolic and hormonal processes during sleep. Sleep hours. Factors affecting sleep. Relaxation techniques. | 7 | 10.8 | 3.14 (1.07) |
| Physical activity | Physical activity and sedentary lifestyles. Factors conditioning physical activity. Factors promoting physical activity. Prevention of diseases Healthy recommendations | 8 | 12.3 | 3.50 (0.54) |
| Treatment adherence | Following the recommendations of health care providers. Importance of dosage and timing. Consequences of non-adherence. Positive attitude towards treatment. Support and advantages. | 7 | 10.8 | 3.43 (0.54) |

Table 2. Evaluation of health education program among PAIEM and non-PAIEM individuals.

| Variable | % Yes | | Chi-squared (Continuity correction) | |
|---|-------|----------|--|------|
| | PAIEM | No-PAIEM | Valor | p |
| Will you change negative habits? | 78.9% | 73.9% | 0.01 | 0.91 |
| Will you adopt positive habits? | 57.9% | 84.8% | 4.07 | 0.04 |
| Has your perception on the issue changed? | 57.9% | 87.0% | 5.11 | 0.02 |
| Have you discovered new information? | 57.9% | 67.4% | 0.20 | 0.66 |
| Do you feel well informed? | 73.7% | 87.0% | 0.87 | 0.35 |

the percentage of inmates who did have an intention of change was higher among non- PAIEM individuals (84.8%) than among PAIEM individuals (57.9%). Something similar was observed regarding the change of perception on the issue since 87.0% of non-PAIEM individuals answered positively to this question while only 57.9% of PAIEM individuals did so.

Moreover, socio-demographic features of participants were analyzed (age, level of education and marital status) to determine whether they were related to the intention of change and the perception after the Health Education program.

Starting with age, there was no statistical association between this variable, the intention to change habits and perception (Table 3).

With regard to the level of education, the results depicted in Table 4 reveal that this variable was only associated to the percentage of positive answers regarding the change of perception ($p= 0.02$). In fact, there were a higher percentage of individuals that reported having changed their perception on the issue among those who had not completed any type of education (89.7%) than among those who had (61.5%).

With regard to marital status, this variable was significantly associated with the intention of change ($p=0.02$) and almost significantly with feeling well informed ($p=0.09$). In particular, all inmates with stable partners had the intention to change their negative habits and felt well informed while the rate of positive answers to these questions among single inmates was 67.3% and 77.6% respectively (Table 5).

DISCUSSION

One of the main results of this study is the high rate of positive response following Health Education

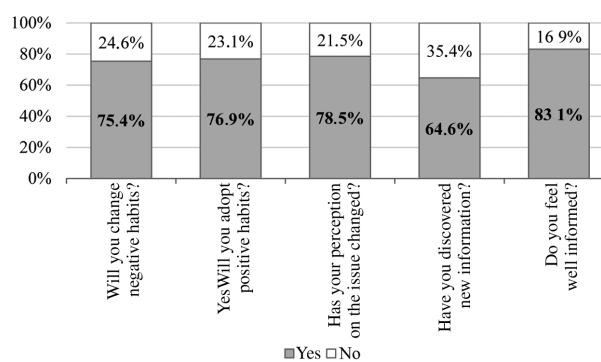


Figure 1. Evaluation of Health education program.

programs and the intention to adopt healthy habits. Three out of every four participants intended to change their negative habits and adopting healthier ones.

There is scarce literature on the evaluation of health promotion programs in prisons. One of the most recent international publications shows the positive results of health promotion among female inmates and its implication within prison to share new knowledge on the issue of health²⁶.

In this study overall valuation of sessions was very positive. The vast majority of participants reported feeling satisfied or very satisfied after attending the educational session. In fact, community activities have proven very effective in the promotion of health and the prevention of diseases²⁷ also within prisons²⁸.

When comparing results between PAIEM and non-PAIEM individuals, the percentage of positive answers regarding the intention of adopting positive habits was higher among non-PAIEM individuals.

A potential explanation of this would be that Health Education sessions, although specifically de-

Table 3. Evaluation of health education program according to age.

| Variable | % Yes | | Chi-squared (Continuity correction) | |
|---|--------------------|-------------------|--|------|
| | Under 40 years old | 40 years or older | Value | p |
| Will you change negative habits? | 70.4% | 78.9% | 0.25 | 0.62 |
| Will you adopt positive habits? | 77.8% | 76.3% | 0.00 | 1.00 |
| Has your perception on the issue changed? | 77.8% | 78.9% | 0.00 | 1.00 |
| Have you discovered new information? | 74.1% | 57.9% | 1.17 | 0.28 |
| Do you feel well informed? | 81.5% | 84.2% | 0.00 | 1.00 |

Table 4. Evaluation of health education program according to level of education.

| Variable | % Yes | | Chi-squared (Continuity correction) | |
|---|------------------------------|-------------------------------------|--|------|
| | No previous complete studies | Previous studies (at least Primary) | Value | p |
| Will you change negative habits? | 79.5% | 69.2% | 0.42 | 0.52 |
| Will you adopt positive habits? | 79.5% | 73.1% | 0.09 | 0.76 |
| Has your perception on the issue changed? | 89.7% | 61.5% | 5.77 | 0.02 |
| Have you discovered new information? | 64.1% | 65.4% | 0.00 | 1.00 |
| Do you feel well informed? | 84.6% | 80.8% | 0.01 | 0.95 |

Table 5. Effectiveness of health education program among individuals with and without partner.

| Variable | % Yes | | Chi-squared (Continuity correction) | |
|---|------------|---------|--|------|
| | No partner | Partner | Value | p |
| Will you change negative habits? | 67.3% | 100.0% | 5.28 | 0.02 |
| Will you adopt positive habits? | 75.5% | 81.3% | 0.02 | 0.90 |
| Has your perception on the issue changed? | 75.5% | 87.5% | 0.44 | 0.51 |
| Have you discovered new information? | 61.2% | 75.0% | 0.49 | 0.48 |
| Do you feel well informed? | 77.6% | 100.0% | 2.87 | 0.09 |

signed according to the health needs of inmates included in PAIEM, possibly were not sufficiently adapted to their cognitive and learning skills. Moreover, it is worth considering that this program includes individuals with mental disorders and according to some

authors there are personality variables such as impulsivity or recklessness which are closely related to criminal behavior²⁹ and do not promote either health habits. On the other hand, the same year when the study was carried out (2013) the Guidelines for the

Promotion of Mental Health within Prisons³⁰ were published in Spain, which serves as a reference for the design of new Health Education programs aimed at inmates with mental disorders.

The results of this study also reveal the poor literacy of inmates. 38.5% of participants had not completed compulsory secondary education and only 1.5% had gone to University. Previous studies carried out in Spain³¹ revealed a literacy rate of 9% in prison and over 50% of inmates having not completed their primary education¹⁸. It has also been observed that part of the imprisoned population has been raised by families with low income and as adults they have low socio-economic situations with elementary primary education³². These data corresponds what has been observed in the present study.

We know from this study that inmates with no education reported higher positive response rates on the change of perception than those who had completed some kind of education. This could be due to the fact that the first had less previous knowledge on the issues included in the sessions and thus, after the sessions the change has taken place.

There are different explanations regarding this association. In Norwegian prisons³³, they observed that neither education nor ethnicity seemed to explain the differences among inmates regarding the search of helping behaviours while other studies³⁴ report that there is indeed an association between education and the search of helping behaviors. The present study has observed an association with the change of perception but not with other variables under consideration.

With regard to marital status, a significant association was observed considering the intention of change. It seems reasonable to think that the fact of having a stable partner would translate into further intention of changing negative habits. While it is true that being married can be considered, as any other social support, a protective factor of individual health, there is also evidence that imprisonment entails a high rate of break-ups and an increased risk for sexually transmitted diseases as a consequence of intercourse within prison³⁵. Both factors are especially negative for the health of inmates.

Limitations and strengths. Among the limitations of this study we can note the following: First, we must consider the potential cognitive impairment of inmates with mental disorders, included in PAIEM. Therefore, we designed a special questionnaire with simple and short questions. Second, the size of the sample is reduced, something which limits the generalization of results. Third, the intention of change regarding health habits and the perception has been analyzed

but we do not count upon information on actual effective changes. This is why future research could include long term follow-up to determine whether these intentions translate into real changes.

On the other hand, among its strengths, we must note that thematic diversity of sessions has made a significant contribution. Experts on health education with group methodology always recommend creating small groups as to ensure their operability³⁶ and in this sense the range has been of 5 to 14 participants, thus promoting the efficiency and dynamics of sessions. Multidisciplinary and interinstitutional actions to implement this pilot project are also one of its strengths. It has been planned to repeat it with a greater sample and better adaptation of groups after the high degree of satisfaction among participants.

Applicability. The challenge of this kind of projects is the principle of equity of Public Health and developing new strategies for the promotion of health aimed at especially vulnerable populations. As a novelty this study has included a new approach of health education sessions which have been carried out by Nursing students.

Conclusions. Health education is a crucial and effective instrument in the promotion of health habits and the prevention of diseases within prisons. It highlights the need for integrating these tools in the nucleus of health promotion strategies as for carrying out follow-up studies to determine their effectiveness.

CORRESPONDENCE

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REFERENCES

1. Pont P. ¿Debe ser la Educación para la Salud objetivo prioritario en la Sanidad Penitenciaria? Rev Esp Sanid Penit. 2004; 6(3): 102-5.
2. Scarfó F. El derecho a la educación en las cárceles como garantía de la Educación en Derechos Humanos. Rev IIDH- Instituto Interamericano de Derechos Humanos. 2002; 36: 291-324.
3. Serrano Tarraga MD. Derecho a la salud de los internos en centros penitenciarios y sanidad penitenciaria (I). Rev Derecho UNED. 2010; 6: 413-46.

4. Brugha T, Singleton N, Meltzer H, Bebbington P, Farrell M, Jenkins R, et al. Psychosis in the community and in prisons: a report from the British National Survey of psychiatric morbidity. *Am J Psychiatry*. 2005; 162(4):774-80.
5. Arroyo JM, Bedía M, Ferrer V, García S, Gómez P, Gutiérrez FJ, Martín M. Guía de educación para la salud en el medio penitenciario. 2ª ed. Madrid: Ministerio del Interior: Secretaría General Técnica; 2009.
6. García-Guerrero J, Marco A. Sobreocupación en los centros penitenciarios y su impacto en salud. *Rev Esp Sanid Penit*. 2012; 14(3):106-13.
7. Merino B. Las prisiones: una nueva oportunidad para la salud. *Rev Esp Sanid Penit*. 2005; 7(1): 1-3.
8. Altamirano Z. El bienestar psicológico en prisión. Propuesta de un programa para potenciar recursos personales y reducir los efectos del encarceramiento sobre la salud de los internos. Madrid: Ministerio del Interior. Secretaría General Técnica; 2011.
9. Bellver V. Ética, salud y atención sanitaria en las prisiones. *Rev Esp Sanid Penit*. 2007; 9(1): 7-9.
10. Minchón-Hernando A, Domínguez-Zamorano JA, Gil-Delgado Y. Educación para la salud en centros penitenciarios: evaluación de una experiencia en personas con diabetes. *Rev Esp Sanid Penit*. 2009; 11(3): 73-9.
11. Almost A, Gifford WA, Doran D, Ogilvie L, Miller C, Rose DN, et al. Correctional nursing: a study protocol to develop an educational intervention to optimize nursing practice in a unique context. *Implementation Science*. 2013; 8:71-7.
12. Ayuso A. La intervención socioeducativa en el tratamiento penitenciario. *Pedagogía Social. Revista Interuniversitaria*. 2000; 6(7): 73-99.
13. Principios generales de la salud pública, del capítulo II de Título Preliminar de la Ley 33/2011 de 4 de octubre (B.O.E. 240, de 5/10/2011). Disponible en: <http://www.boe.es/boe/dias/2011/10/05/pdfs/BOE-A-2011-15623.pdf>
14. Del Pozo-Serrano FJ, Añños-Bedrinana FT. La Educación Social Penitenciaria. ¿De dónde venimos y hacia dónde vamos? *Rev Complutense Educación*. 2013; 4(1): 47-68.
15. Vera-Remartínez EJ, Borraz-Fernández JR, Domínguez-Zamorano JA, Mora-Parra LM, Casado-Hoces SV, González-Gómez JA, et al. GESESP. Prevalencia de patologías crónicas y factores de riesgo en población penitenciaria española. *Rev Esp Sanid Penit*. 2014; 16(2): 38-47.
16. Protocolo de Aplicación del Programa Marco de Atención Integral a Enfermos Mentales en centros penitenciarios (PAIEM). Madrid: Secretaría General de Instituciones Penitenciarias; 2009.
17. Fazel S, Baillargeon J. The health of prisoners. *Lancet*. 2011; 377: 956-65.
18. Arnau-Peiró AF, García-Guerrero J, Herrero-Matías A, Castellano-Cervera JC, Vera-Remartínez EJ, Jorge-Vidal V, et al. Descripción de la consulta psiquiátrica en centros penitenciarios de la Comunidad Valenciana. *Rev Esp Sanid Penit*. 2012; 14(2): 50-61.
19. Harzke AJ, Baillargeon JG, Kelley MF, Diamond PM, Goodman KJ, Paar DP. HCV-related mortality among male prison inmates in Texas, 1994-2003. *Ann Epidemiol*. 2009; 19(8): 582-9.
20. Martín V, Brugos M, Valcárcel I. Prevalencia de tratamiento de la infección tuberculosa en una prisión provincial. *Rev Esp Salud Pública*. 2000; 74: 361-6.
21. Rich JD, Dumont D, Allen S. Incarceration and Health. Working paper prepared for the National Academies Workshop on Health and Incarceration. Washington: National Academy of Sciences; 2012.
22. Kending NE. Correctional health care systems and collaboration with academic medicine. *J Am Medical Assoc*. 2004; 292(4), 501-3.
23. Smith A. Committee on Causes and Consequences of High Rates of Incarceration; Committee on Law and Justice; Division of Behavioral and Social Sciences and Education; National Research Council; Board on the Health of Select Populations; Institute of Medicine. Health and Incarceration: A Workshop Summary. Washington D.C.: National Academies Press; 2013.
24. Casado Calleja J. Visión del Sistema Penitenciario Español. IPSE-ds. 2013; 6: 41-53.
25. Arroyo Cobo JM. Estrategias asistenciales de los problemas de salud mental en el medio penitenciario, el caso español en el contexto europeo. *Rev Esp Sanid Penit*. 2011; 13(3): 100-11.
26. Ramsden V, Martin R, McMillan J, Granger-Brown A, Tole B. Participatory health research within a prison setting: a qualitative analysis of 'Paragraphs of passion'. *Glob Health Promot*. 2015 Dec;22(4):48-55. Doi:10.1177/1757975914547922.
27. Cofiño R, Alvarez B, Fernandez S, Hernandez R. Promoción de la salud basada en la evidencia: ¿realmente funcionan los programas de salud comunitarios? *Aten Primaria*. 2005; 35: 478-83.
28. Clouse ML, Mannino D, Curd PR. Investigation of the correlates and effectiveness of a prison-based wellness program. *J Correct Health Care*. 2012; 18(3):184-97.

29. Rodríguez-Fornells A, López-Capdevila JM, Andrés-Pueyo A. Personalidad y comportamiento penitenciario. *Psycothema*. 2002; 4: 90-100.
30. Bustamante-Navarro R, Paredes-Carbonell JJ, Aviñó Juan-Ulpiano D, González-Rubio J, Pitarch-Monzó C, Martínez-Martínez L. Diseño participativo de una Guía para la promoción de la Salud Mental en el medio penitenciario. *Rev Esp Sanid Penit*. 2013; 15(2): 44-53.
31. Solbes M. Estudio socioeducativo de los jóvenes internados en prisiones andaluzas. *Rev Esp Invest Criminol*. 2008; 3(6): 1-6.
32. Friestad C. Socio-economic status and health in a marginalized group: the role of subjective social status among prison inmates. *Eur J Public Health*. 2010; 20(6): 653-8.
33. Berg Nettet M, Rustad AB, Kjelsberg E, Almvik R, Håkon Bjørngaard J. Health care help seeking behaviour among prisoners in Norway. *BMC Health Services Research*. 2011; 11: 301-8.
34. Skogstad P, Deane FP, Spicer J: Social-cognitive determinants of help seeking for mental health problems among prison inmates. *Crim Behav Ment Health*. 2006; 16: 43-59.
35. Khan MR, Behrend L, Adimora A, Weir SS, White BL, Wohl DA. Dissolution of Primary Inmate Relationships during Incarceration and implications for post-release HIV transmission. *J Urban Health*. 2011; 88(2): 365-75.
36. Sáez S, Calvo RM. La educación para la salud en grupos. En: Marques F, Sáez S, Guayta R, ed. *Métodos y medios en promoción y educación para la salud*. Barcelona: UOC; 2004. p. 115-28.