

# UTILITY OF A TRAINING PROGRAMME IN THE DETECTION OF PSYCHOLOGICAL DISORDERS IN CENTRES FOR THE SOCIALLY EXCLUDED

Ana Belén Santos-Olmo Sánchez, Manuel Muñoz López, Aída de Vicente Colomina and Eloísa Pérez Santos  
*Faculty of Psychology, Complutense University of Madrid*

**Introduction:** In the present article, the main barriers affecting excluded people's access to health services are analyzed and the main intervention alternatives are reviewed. Outreach orientation in the intervention process is presented as the most useful strategy to break down these barriers. The role of training programmes for psychological disorders screening is delimited.

**Methods:** An education and training programme in mental health screening of homeless persons was designed (12 hours: 6 training modules in detection and management of Anxiety Disorders, Mood Disorders, Schizophrenia, Cognitive disorders and Drug and Alcohol Abuse).

The professionals were trained and their diagnoses were compared with those obtained by some well-standardized screening and diagnostic instruments: Screening interview (Vázquez & Muñoz, 2002; Mini-mental (Foldstein et al., 1975; SCID-I (First et al., 1999).

**Results:** An improvement in the agreement indexes between professionals and standardized instruments is observed. Likewise, specificity, sensitivity and predictive power of staff diagnoses increased after the training programme.

**Conclusions:** The results are analyzed from the point of view of their usefulness and rapid application by workers without specific mental health training at centres for the socially excluded.

**Key words:** Social exclusion, Outreach, Training, Homeless, Psychopathological screening.

**Introducción:** En el presente trabajo se revisan las principales barreras que afectan a las personas que sufren procesos de exclusión social en su acceso a los servicios de salud mental y se analizan las principales alternativas de intervención. Se resalta la búsqueda activa (outreach) como principal estrategia de superación de dichas barreras y, en especial, el papel de los programas de entrenamiento de los profesionales y voluntarios de atención directa en la detección de trastornos psicológicos que permitan iniciar de forma más rápida el proceso de atención.

**Métodos:** Se diseñó y se sometió prueba un programa de Educación y entrenamiento para la detección de trastornos mentales graves en Personas Sin Hogar (12 horas: 6 módulos de entrenamiento en detección y manejo de trastornos de Ansiedad, Estado de Ánimo, Esquizofrenia, Trastornos Cognitivos y Abuso de Alcohol y otras drogas).

Se entrenó a los profesionales del centro y se contrastó la concordancia de sus diagnósticos con los realizados mediante instrumentos estandarizados: Entrevista de detección (Vázquez y Muñoz, 2002; Mini-mental (Folstein et al., 1975) y SCID-I (First et al., 1999).

**Resultados:** Se observó una mejoría muy importante en todos los índices de concordancia entre el personal del centro y los instrumentos estandarizados. Mejoraron igualmente los índices de sensibilidad y especificidad y el poder predictivo de los diagnósticos realizados por los profesionales.

**Conclusiones:** Se revisan los principales resultados desde el punto de vista de su utilidad inmediata en su aplicación en centros de atención a personas con problemas de exclusión social en los que el personal de atención directa a los usuarios no tenga una formación en diagnóstico y en Salud Mental.

**Palabras clave:** Exclusión social, Búsqueda Activa, Formación, Personas sin hogar, Detección de psicopatología.

## INTRODUCTION

Research has shown that homeless people and those accessing resources for this group suffer from a wide range of psychological problems, as well as drug and alcohol abuse, which are exacerbated in many cases by

lack of treatment (Koegel, Burnam & Farr, 1988; Greifenhagen & Fichter, 1997; Vázquez, Muñoz & Sanz, 1997; Muñoz, Vázquez & Vázquez, 2003). However, one of the characteristics of the Spanish and European health systems is their universalization (since 1989 in the Spanish case), a feature which guarantees each individual the right to enjoy the best possible state of health given their personal and social circumstances. This has brought about a reduction or weakening of the effects of exclusion in marginal or low-income groups.

The original Spanish version of this paper has been previously published in *Intervención Psicosocial*, 2005, Vol. 14. No 1, 65-80

.....  
Correspondence concerning this article should be addressed to Manuel Muñoz López. Facultad de Psicología. Universidad Complutense de Madrid. Spain. E-mail: mmunoz@psi.ucm.es

Despite this notable advance, various authors (Timms, 1996; Craig & Timms, 2000; Craig, Brandt, Leonori & Muñoz, 2002) point out the existence of four types of barrier to health care access for people caught up in a process of social exclusion and suffering from mental illness, barriers which make this population's contacts with health care irregular, uncoordinated, difficult to follow up and inefficient. The barriers described by these authors are:

- 1) Barriers to recovery from mental disorders and their consequences, given that physical illnesses and mental disorders limit the individual's capacity to cope with various aspects of everyday life.
- 2) Barriers arising from poverty, underlining the fact that official financial aid available to people with mental disorders tends to be insufficient, allowing them only to cover the most basic needs, such as food and, in the best cases, shelter.
- 3) Barriers arising from the social isolation in which most of these people live. Lack of contact with close family members, friends, professionals, etc., makes access to health care more difficult, as they have no one to help them.
- 4) Barriers within the services themselves, due to the fragmentation of health care and the deficient integration of health and social services, which create a barrier when dealing with a population suffering not only from physical but also mental health problems, together with high levels of social exclusion.

These problems in accessing the health services network form the basis for this study, which proposes an outreach strategy as the best way to improve psychological or psychiatric care for people with mental illness in social exclusion situations, specifically those using services for the homeless.

The outreach strategy is a type of approach to the user with mental health problems that promotes a new line of action. Health workers leave their offices and health centres and insert themselves into the community in order to make contact with people in their own environment, be it in their homes, in a café, in the street, or elsewhere (Winchester & Lloyd, 2002).

It is a strategy with a **pro-active** philosophy, looking for patients in the street, rather than waiting for them in the surgery as in more passive methods, valid as these may be with other populations; it is an **ecological** approach, taking the environment of the person with the mental disorder as a starting point; and it is a **multidisciplinary** approach, with a variety of professionals tak-

ing part in the process, as well as volunteers.

In general, any programme of this type covers five tasks inherent in the outreach model (Morse, Calsyn, Miller et al., 1996):

1. Establishing contact and credibility with the potential beneficiaries of the programme;
2. Identifying people with mental disorders, the main focus of this article;
3. Engaging clients;
4. Assessment and planning of the treatment;
5. Follow-up.

The most frequently used outreach strategies for identifying the people with mental disorder are:

1. Letters or phonecalls with information about new treatment methods for persons suspected of having a mental disorder included on registers (McFall, Malta, Fontana, et al., 2000).
2. Qualified and clinically trained staff going to where the population at risk is to be found. They are usually groups consisting of psychiatrists, psychologists, social workers and psychiatric nurses (Morris & Warnock, 2001; Draper, 2000; Fisk, Rowe, Laub et al., 2000; Kaspro, Rosenheck, Frisman et al., 2000; Levy, 2000; Rosenheck, 2000; Warnes & Crane, 2000; Witbeck Hornfeld & Dalack, 2000; Lam & Rosenheck, 1999; Rosenheck, Frisman & Kaspro, 1999; Cuijpers, 1998; Frisman & Rosenheck, 1997; Rosenheck & Lam, 1997a, 1997b; Stovall, Cloninger & Appleby, 1997; Buhrich & Teesson, 1996).
3. Education and Training Programmes aimed at personnel who maintain continuous and periodical contact with the population at risk, be they workers at a centre; parents, teachers or carers; or para-professionals (Tischler, Vostanis, Bellerby et al., 2002; Centre for autistic children of Philadelphia, 2000; Rabins, Black, Roca et al., 2000; Black, Rabins, German et al., 1998; Timms, 1998; Zigler & Gilman, 1998; Musser & Carrillo, 1997; McGorry, Edward, Mihalopoulos et al., 1996; Stolee, Kessler & LeClair, 1996). This is the strategy adopted by the present study, designing an implementing an education and training programme for the detection of mental disorders in natural situations.

Furthermore, populations benefiting from outreach are those which, depending on the characteristics of the individuals or their disorder, have limited chances of accessing mental health care by their own means. Consequently, the most relevant studies have focused on

children and adolescents (Centre for autistic children of Philadelphia, 2000; Zigler & Gilman, 1998); war veterans (McFall, Malta, Fontana, et al., 2000; Frisman & Rosenheck, 1997; Stovall, Cloninger & Appleby, 1997); the elderly (Draper, 2000; Rabins, Black, Roca et al., 2000; Black, Rabins, German et al., 1998; Cuijpers, 1998; Stolee, Kessler & LeClair, 1996); refugees and immigrants (Musser & Carrillo, 1997); and the homeless (Tischler, Vostanis, Bellerby et al., 2002; Morris & Warnock, 2001; Fisk, Rowe, Laub et al., 2000; Kaspro, Rosenheck, Frisman et al., 2000; Levy, 2000; Rosenheck, 2000; Warnes & Crane, 2000; Witbeck Hornfeld & Dalack, 2000; Lam & Rosenheck, 1999; Rosenheck, Frisman & Kaspro, 1999; Timms, 1998; Frisman & Rosenheck, 1997; Rosenheck & Lam, 1997a, 1997b; Buhrich & Teesson, 1996), this last-mentioned population being the focus of the present study.

The benefits of implementing outreach strategies among the homeless are as follows:

- Enhance and optimize the detection of homeless people with serious mental disorders.
- Ensure that an increasing number of detected cases (those likely to suffer mental illness) actually seek treatment and enter the mental healthcare network.
- Encourage the systematic use of social and health services so that homeless people can overcome their reluctance to turn to institutional help.
- Maintain continuous and periodical contact with the homeless people detected, assessed and treated with the aim of avoiding relapses and helping them to solve potential problems arising in the normalization of their situation.
- Improve levels of immediate care through better recognition by professionals of each individual's needs and problems.

In sum, the study was motivated by three facts: the high incidence of mental disorder among the homeless (Vázquez & Muñoz, 2001; Leonori, Muñoz, Vázquez et al., 2000; Vázquez, Muñoz & Sanz, 1997; Muñoz, Vázquez & Cruzado, 1995); the serious problems these populations have for accessing mental health care (Timms, 1996; Craig & Timms, 2000); and finally, the total absence in the Spanish context, as far as we know, of programmes of the kind involved in this study.

Thus, a programme was designed to train for detecting homeless services users with serious mental disorders, the *Education and Training Programme for the Detection of Serious Mental Disorder in Homeless Persons*, within an outreach framework.

This programme was used to train staff working on the *Programa Integrado San Vicente de Paul* in Madrid (the programme has a social dining room, a day centre for homeless persons, occupational and training workshops, integration programmes and protected flats. More than 1000 people in social exclusion situations are attended every month). This centre was chosen because it remains open throughout the year. Its staff includes social workers and volunteers, all without specific clinical training, and who attend to a large number of users in quite heterogeneous life situations, among them many with mental illnesses disorders.

## OBJECTIVES

The idea of this study is to introduce the outreach approach in services for the homeless, specifically through the implementation of training courses, with the aim of attaining improved immediate care and facilitating contact with the mental health services network for those who may have psychological disorders. Both aspects should provide a significant improvement in well-being and quality of life for people with these kinds of problems. Finally, we hope to sensitize and involve the public administration, programmes, centres, professionals, private organizations and public opinion with respect to the necessity and usefulness of changing the passive attitude currently prevailing in social and health services to a more active one, as required by outreach strategies.

The specific objectives were as follows:

- (1) **To design** the *Education and Training Programme for the Detection of Serious Mental Disorder in Homeless Persons*, aimed at professionals and volunteers working with people in social exclusion situations.
- (2) **To evaluate** the effectiveness of the programme in the detection of psychological disorders, training staff and volunteers at a day centre for the homeless.

## HYPOTHESIS

The study tested the following main hypothesis: there will be an improvement in the degree of concurrence in diagnosing positive and negative cases (between the diagnoses of staff at the centre and that of standardized instruments) after application of the *Education and Training Programme*, compared to the degree obtained before its application.

## METHOD

Given the study's complexity, its organization is presented schematically (see Fig. 1).

### A. Education and training programme

First of all, the *Programa de Atención Integral San Vicente de Paul* was contacted and the Education and Training Programme was designed, bearing in mind the objectives of the research and the needs of the centre. The programme was designed to take twelve hours and was composed of six two-hour modules. Written and audio-visual support material was prepared for the course. The contents can be outlined as follows:

- **Module 1:** Skills for the detections and management of mental disorder.
  - What is mental health?
  - Evaluation of abnormal behaviour
  - Skills for dealing with mental disorder: communication skills and skills for dealing with delirious and violent persons.
- **Modules 2 to 6:**
  - Anxiety disorders
  - Major Depression Disorder
  - Schizophrenia
  - Cognitive Disorders
  - Alcohol and drug abuse and dependence

These last five modules share the same internal structure: general description of the disorder; diagnostic criteria DSM-IV-TR (APA, 2000); and finally, brief identification guidelines for the disorder in question, with key questions and observable symptoms.

Staff and volunteers at the centre who attended the course were supplied with explanatory written material for each of the modules.

After designing the course and contacting the centre, the next stage was pre-treatment measurement.

### B. Pre-treatment measurement

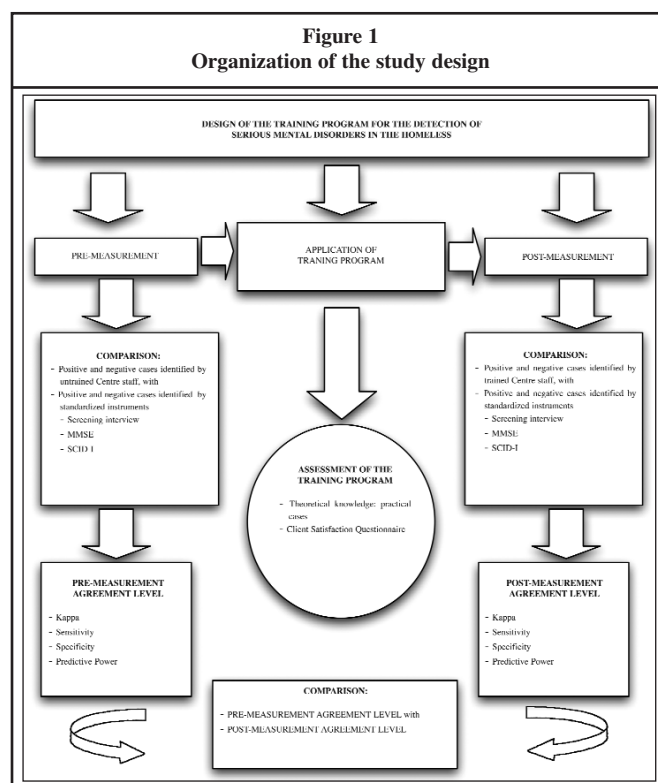
At this point of measurement, it is important to make clear that two types of participant were involved in the course. On the one hand were the professionals and volunteers, whose diagnostic skills were tested before and after taking part in the Education and Training Programme, and on the other, the users of the centre who were to be assessed.

All four participating workers from the centre were women, with an average age of 41. Two of them were social workers and the other two were volunteers in charge of the workshops. Experience in social exclusion work was spread equally between 1-5 years, on the one hand, and more than 5 years, on the other.

Regarding the users studied, a random selection was performed using the lists of persons who came to the centre in January 2002 and the list of persons who attended the workshops (see Table 1). The selection process consisted in choosing every fourth person on the general list (25% of the total number of users), and every second person on the workshops list (50% of those attending). In the latter case, the percentage of users selected was increased given the small numbers attending the workshops. One user from each list was chosen at random as a starting point for the selection process.

For each sample, workers were asked to classify the users into positives (liable to suffer some kind of mental disorder) and negatives (not liable to suffer mental disorder). Afterwards, to check the accuracy of diagnosis, a comparative analysis with standardized instruments was carried out: the Screening Interview (*Entrevista de Detección*, Vázquez & Muñoz, 2002), an interview containing key questions for given mental disorders; the Mini-Mental State Examination (Folstein, Folstein & McHugh, 1975); and the Structured Clinical Interview for DSM-IV Axis I Disorders (SCID-I) (First, Spitzer, Williams et al., 1999). The procedure was as follows: the Screening Interview was applied to all those selected, and all potentially positive cases were then given the SCID-I.

Figure 1  
Organization of the study design



The Mini-Mental was used in cases of potentially severe cognitive disorders. The same interviewer was used in each case and had no knowledge of the previous diagnosis. The initial objective of the study was to carry out a comparative analysis with standardized instruments on all those identified as positives and on 10% of those classed as negatives. In the case of the positives, it was not possible to put this into practice, for a variety of reasons (insufficient command of Spanish, refusal to participate in the study, leaving the centre, etc.). In all, 24 evaluations were carried out pre-training with standardized instruments, 12 of which were identified by the workers as positives and 12 as negatives (see Table 2).

To calculate the pre-training index, reflected in the statistical indices “kappa index”, “sensitivity” “specificity” and “predictive power”, the positive and negative cases identified by untrained staff were compared to those identified by standardized instruments.

Once the pre-training measurement had been completed, we implemented the training programme.

### C. Implementation of the Education and Training Programme

The programme was run in six sessions, one per module, with part of the final module given over to course evaluation: on the one hand, an objective assessment, by means of the solution of practical cases taken from the DSM-IV Casebook (Spitzer, Gibbon, Skodol et al., 1999); on the other, a subjective assessment through an adapted version of the Client Satisfaction Questionnaire (CSQ-8) (Larsen, Attkisson, Hargreaves et al., 1979; Roberts & Attkisson, 1983).

		Pre-measurement	Post-measurement
Total users	List of total users	548	540
	Workshop attendees	14	14
	<b>Total</b>	<b>562</b>	<b>554</b>
Random selection of sample	List of total users	137 (25%)	135 (25%)
	Workshop attendees	7 (50%)	7 (50%)
	<b>Total</b>	<b>144</b>	<b>142</b>
Identification of positive and negative cases	Positive	28	27
	Negative	116	115
Assessments made (standardized instruments)	Positive	12	16
	Negative	12 (10% of the negatives)	11 (10% of the negatives)
	<b>Total</b>	<b>24</b>	<b>27</b>

### D. Post-training Measurement

Two weeks after the implementation of the programme, a post-training measurement was carried out. At this stage, the same procedure was applied in terms of selecting the users to be screened. As was the case in the pre-course study, it was not possible to make assessments with standardized instruments in all positive cases. Altogether, in this post phase, 27 evaluations were carried out with standardized instruments, 16 cases being identified as positive by the workers and 11 as negative (see Table 2). Everyone who was interviewed was asked to cooperate voluntarily, anonymously and confidentially.

It can be seen that the sample of users for the pre- and post-course screening are equivalent in terms of age, sex and nationality variables (see Table 2).

The comparison made was the same as that made at the pre-training stage, i.e., between positive and negative cases as identified by the now-trained workers and positive and negative cases as identified by the same standardized instruments. After this comparison, the post-course agreement level was obtained, according to the same statistical indices.

The final comparison was then made between pre- and post-course agreement indices.

## RESULTS

### 1. Evaluation of the Education and Training Programme: Practical Cases and Satisfaction

Regarding the objective assessment results of the knowledge acquired on the Education and Training Course, all disorders were correctly identified by the majority of course participants, with 100% correct identification for schizophrenia, cognitive disorders and alcohol and drug abuse/dependence disorders. For the remaining disorders, only one participant erred in their diagnosis (see Table 3).

In terms of satisfaction with the Education and Training Programme, all the participants declared themselves highly satisfied with the course. In general, the highest degree of satisfaction was scored in relation to the following aspects:

- Quality and general features of the programme.
- The fact that all the material was provided in written form.
- The trainer on the course.
- The possibility of running a similar course in other centres.

In addition, medium to high levels of satisfaction were obtained for:

- The fact that they had received the type of information they had expected.
- The usefulness of the course for identifying and detecting serious mental illness as part of their work.
- The possibility of taking part in a similar course in the future.

## 2. Evaluation of Level of Agreement in the Identification of Severe Mental Disorder

To analyze the levels of agreement between the diagnoses made by the staff at the centre and those obtained by standardized instruments, both pre- and post-training, the kappa index was calculated (overall and for each diagnostic category), as well as the indices of sensitivity, specificity and predictive power.

### Kappa Index

With regard to the kappa index results, both for the pre-training measurement (level of agreement between diagnoses of mental illness made by workers before the course and those found by standardized instruments) and for post-training (level of agreement between diagnoses of mental illness made by the now-trained workers and those found by standardized instruments), an increase in the agreement level can be observed. From a non-significant kappa of 0.333 ( $p = 0.098$ ) at pre-training, an unacceptable value, the kappa rose to a significant 0.693 ( $p = 0.000$ ) after training, a good value verging on excellent (see Table 4).

With regard to the kappa obtained for each diagnostic category, this analysis includes major depression disorder, schizophrenia, cognitive disorders, alcohol abuse and dependence, and drug abuse and dependence. For cognitive disorders only post-training results appear, due to the fact that at the pre stage the workers did not identify a single case of cognitive disorder, despite three users in the study showing signs of cognitive deterioration. Anxiety disorders do not appear in this analysis, given that none were diagnosed either pre or post-training by either workers or standardized instruments.

As can be seen in Table 5, significant and good values were found pre-course for both schizophrenia and drug dependence and abuse. Perfect kappas were obtained post-course for these disorders, i.e., equal to 1. For alcohol dependence and abuse, the initial measurement generated an asymptotic level of kappa, which was maintained in the post-measurement. The data referring to depression were surprising, given that the pre-training kappa value was not only non-significant, but also neg-

**Table 2**  
Description of age, sex and nationality variables of the participant sample (pre- and post-training)

Sociodemographic variables	Pre-training measurement group	Post-treatment measurement group
Gender - Males	21 (87.5%)	25 (92.6%)
Age	51.21 (s.d.=10.87)	51.52 (s.d.=10.87)
Nationality - Spanish - Others	12 (50%) 12 (50%)	16 (59,3%) 11 (40,7%)

**Table 3**  
Evaluation Results of the Education and Training Programme: practical cases

DISORDERS ASSESSED	Staff at the Centre (N=4)	
	HITS	MISSES
Obsessive-Compulsive Disorder	3 (75%)	1 (25%)
Post-Traumatic Stress Disorder	3 (75%)	1 (25%)
Anxiety Crisis	3 (75%)	1 (25%)
Depression	3 (75%)	1 (25%)
Schizophrenia	4 (100%)	0 (0%)
Cognitive Disorders (Dementia)	4 (100%)	0 (0%)
Drug/Alcohol Abuse/Dependence	4 (100%)	0 (0%)

**Table 4**  
Level of agreement pre- and post-training between identification of each mental disorder as diagnosed by centre staff and by standardized instruments: Kappa index and significance levels

Kappa value (Significance level)	
Pre	Post
0,333 ( $p=0.098$ )	0,693** ( $p=0.000$ )
* $p=0.05$ ** $p=0.01$	

**Table 5**  
Levels of pre and post agreement between the identification of each diagnostic category by centre staff and by standardized instruments: Kappa index and significance levels

	Kappa (significance level)	
	Pre	Post
Depression	-0.059 ( $p=0.758$ )	0.780** ( $p=0.000$ )
Schizophrenia	0.500** ( $p=0.013$ )	1.000** ( $p=0.000$ )
Cognitive Disorders	-----	0.521** ( $p=0.002$ )
Alcohol Abuse/Dependence	0.833** ( $p=0.000$ )	0.867** ( $p=0.000$ )
Drug Abuse/Dependence	0.647** ( $p=0.001$ )	1.000** ( $p=0.000$ )

ative and unacceptable, while the post-training measurement provided an excellent and significant value. With respect to dementia, this was not considered to be a disorder for detection in the pre-measurement, but in the post-measurement a good and significant kappa index value was obtained.

### Indices of Sensitivity, Specificity and Predictive Power (Positive and Negative)

Regarding the indices of Sensitivity, Specificity and Predictive Power, an improvement can be observed in all three in the post-training measurement, the increase being significant, to a level of 0.05, for Sensitivity (see Table 6).

### CONCLUSIONS

The evidence generated highlights first of all the high degree of satisfaction with the programme of the professionals and their good performance on the training course (satisfaction ratings and learning assessments). Secondly, it goes some way towards confirming the hypothesis of the study; that is, an improvement in the level of agreement between the diagnoses of staff at the centre and those made with standardized instruments in the detection of positive and negative cases is observed after implementation of the Education and Training Programme, by comparison with pre-course measurements.

Thus the development of this programme has generated the following responses to the objectives set:

- Written material has been developed for training in the detection of serious mental disorder, in this case among homeless populations, for professionals and volunteers without clinical training (available from the Psychology Faculty at the Complutense University of Madrid, UCM).

- A process of inclusion of outreach strategies has been initiated within the care services for the homeless, specifically the introduction of training courses, thereby bringing us into line with European trends.
- There has been an improvement in the detection of persons liable to suffering mental disorders, resulting in ever more people detected as having a disorder actually seeking treatment and accessing the mental healthcare network. This improvement in detection also means:
  - Savings in time, effort and money for health service workers, public administration and the users themselves, since people without mental disorders will not become a burden to mental health services.
  - Avoiding further stigmatizing factors caused by incorrect diagnosis of a mental disorder in those homeless persons who do not suffer from one.
  - Avoiding medication of persons who do not need it.
  - Overcoming the tendency among care workers for the homeless to over-diagnose mental disorders, thanks to their having learned a more precise and systematic process of assessment and diagnosis.
- Professionals and volunteers have been provided with tools for identifying and dealing with mental disorders whose utility has been shown empirically.
- Improved detection of the disorder, a higher probability of receiving treatment and a level of care more suited to the needs of the user with a mental disorder have contributed to ensuring and improving the well being of those citizens who suffer from social exclusion, especially those with serious mental disorders.

Furthermore, the application of the programme could be extended to professionals and volunteers working with other groups who have problems accessing healthcare (early detection of schizophrenia, autism, the elderly, immigrants, etc.).

However, the programme was run in only one centre and with a limited number of professionals, and it would be necessary to repeat the process in more centres with a larger number of professionals. This would make possible more complex and exhaustive analyses before generalizing from these results.

In conclusion, our results give us grounds for optimism regarding the application of outreach strategies –more specifically the development and implementation of training courses for professionals and volunteers without specific clinical training– in the homeless population and others suffering from severe social exclusion.

	Pre-training measurement point	Post-training measurement point	Chi-squared	Significance level
Sensitivity	0.643	0.875	3.756*	0.050
Specificity	0.700	0.818	0.732	0.392
Predictive power positive	0.750	0.875	1.333	0.248
Predictive power negative	0.583	0.818	2.496	0.114
* p=0.05				

An outreach orientation to the detection of problems, supported by enhanced technical knowledge, appear to support the idea that the adoption of active attitudes among professionals and volunteers in this type of centre can have clear benefits for the health and quality of life of the users of such centres. This finding is particularly relevant in the case of care services for those suffering from processes of severe social exclusion, since people in these situations do not have their own or social resources with which to overcome those obstacles and barriers that make access to social and health services more difficult for them.

#### ACKNOWLEDGEMENTS

We should like to thank the management and staff at the Centro San Vicente de Paul for the help provided in carrying out this study. Our work was partially financed by the Proyecto Inclusión (Plan Nacional I+D+I, 2000-2003).

#### REFERENCES

- Black, B.S., Rabins, P.V., German, P., Roca, R., McGuire, M. & Brant, L.J. (1998). Use of formal and informal sources of mental health care among older African-American public housing residents. *Psychological Medicine*, 28 (3), 519-530.
- Buhrich, N. & Teesson, M. (1996). Impact of a Psychiatric Outreach service for homeless persons with schizophrenia. *Psychiatric Services*, 47 (6), 644-646.
- Center for Autistic Children of Philadelphia, (2000). A comprehensive program for treating profoundly autistic children. *Psychiatric Services*, 51(11), 1439-1440.
- Craig, T. & Timms, P. (2000). Facing up to social exclusion: services for homeless mentally ill people. *International Review of Psychiatry*, 12, 206-211.
- Cuijpers, P. (1998). Psychological outreach programmes for the depressed elderly: a meta-analysis of effects and dropout. *International Journal of Geriatric Psychiatry*, 13 (1), 41-48.
- Draper, B. (2000). The effectiveness of old age psychiatry services. *International Journal of Geriatric Psychiatry*, 15 (8), 687-703.
- First, M. B., Spitzer, R.L., Williams, J.B. & Gibbon, M. (1999). *Entrevista clínica estructurada para los trastornos del Eje I del DSM-IV. Versión Clínica (SCID-I-VC)*. Barcelona: Masson.
- Fisk, D., Rowe, M., Laub, D., Calvocoressi, L. & DeMino, K. (2000). Homeless persons with mental illness and their families: Emerging issues from clinical work. *Families in Society*, 81(4), 351-359.
- Folstein, M.F., Folstein, S.E. & McHugh, P.R. (1975). Mini-Mental State; a practical method for grading the cognitive state of patients for the clinician. *Journal of Psychiatric Research*, 12, 189-198.
- Frisman, L.K. & Rosenheck, R. (1997). The relationship of public support payments to substance abuse among homeless veterans with mental illness. *Psychiatric Services*, 48 (6), 792-795.
- Kaspro, W.J., Rosenheck, R.A., Frisman, L. & DiLella, D. (2000). Referral and housing processes en a long-term supported housing program for homeless veterans. *Psychiatric Services*, 51(8), 1017-1123.
- Lam, J.A. & Rosenheck, R. (1999). Street Outreach for Homeless Persons with serious mental illness. Is it effective?. *Medical Care*, 37 (9), 894-907.
- Larsen, D.L., Attkisson, C.C., Hargreaves, W.A., LeVois, M., Nguyen, T.D., Roberts, R.E., & Stegner, B. (1979). Assessment of client/patient satisfaction: development of a general scale. *Evaluation and Program Planning*, 2, 197-207.
- Leonori, L., Muñoz, M., Vázquez, C., Vázquez, J.J., Bravo, M.F., Nuche, M., Brandt, P., Bento, A. & Horenbek, B. (2000). The mental health and social exclusion European network: a research activity report on European homeless citizens. *European Psychologist*, 5(3), 245-251.
- Levy, J.S. (2000). Homeless outreach: On the road to pre-treatment alternatives. *Families in Society*, 81(4), 360-368.
- McFall, M., Malta, C., Fontana, A. & Rosenheck, R.A. (2000). Effects of an outreach intervention on use of mental health services by veterans with posttraumatic stress disorder. *Psychiatric Services*, 51(3), 369-374.
- McGorry, P.D., Edwards, J., Mihalopoulos, C., Harrigan, S.M. & Jackson, H.J. (1996). EPPIC: An evolving system of early detection and optimal management. *Schizophrenia Bulletin*, 22(2), 305-326.
- Morris, D.W. & Warnock, J.K. (2001). Effectiveness of a Mobile Outreach and Crisis Services unit in reducing psychiatric symptoms in a population of homeless persons with severe mental illness. *Journal Oklahoma State Medical Association*, 94 (8), 343-346.
- Morse, G.A., Calsyn, R.J., Miller, J., Rosenberg, P., West, L. & Gilliland, J. (1996). Outreach to homeless mentally ill people: conceptual and clinical considerations. *Community Mental Health Journal*, 32(3), 261-274.



- Muñoz, M., Vázquez, C. & Cruzado, J.A. (1995). *Personas Sin Hogar en Madrid: Informe psicosocial y epidemiológico*. Madrid, Comunidad de Madrid.
- Musser, G.J. & Carrillo, D.F. (1997). The use of bilingual, bicultural paraprofessionals in mental health services: issues for hiring, training, and supervision. *Community Mental Health Journal*, 33(1), 51-60.
- Rabins, P.V., Black, B.S., Roca, R., German, P., McGuire, M., Robbins, B., Rye, R. & Brant, L. (2000). Effectiveness of a nurse-based Outreach program for identifying and treating psychiatric illness in the elderly. *JAMA*, 283 (21), 2802-2809.
- Roberts, R.E. & Attkisson, C.C. (1983). Assessing client satisfaction among Hispanics. *Evaluation and Program Planning*, 6(3-4), 401-413.
- Rosenheck, R. (2000). Cost-effectiveness of services for mentally ill homeless people: The application of research to policy and practice. *American Journal of Psychiatry*, 157(10), 1563-1570.
- Rosenheck, R., Frisman, L. & Kaspro, W. (1999). Improving access to disability benefits among homeless persons with mental illness: An agency-specific approach to services integration. *American Journal of Public Health*, 89(4), 524-528.
- Rosenheck, R. & Lam, J.A. (1997a). Homeless mentally ill clients' and providers' perceptions of service needs and clients' use of services. *Psychiatric Services*, 48 (3), 381-386.
- Rosenheck, R. & Lam, J.A. (1997b). Client and site characteristics as barriers to service use by homeless persons with serious mental illness. *Psychiatric Services*, 48 (3), 387-390.
- Spitzer, R.L., Gibbon, M., Skodol, A.E., Williams, J.B.W. & First, M.B. (1999). *DSM-IV: Libro de Casos*. Barcelona: Masson.
- Stolee, P., Kessler, L. & Le Clair, J.K. (1996). A community development and outreach program in geriatric mental health: four years' experience. *Journal of the American Geriatrics Society*, 44 (3), 314-320.
- Stovall, J.G., Cloninger, L. & Appleby, L. (1997). Identifying homeless mentally ill veterans in jail: a preliminary report. *Journal of American Academy of Psychiatry and the Law*, 25 (3), 311-315.
- Timms, P. (1996). Management aspects of care for the homeless mentally ill. *Advances in Psychiatric Treatment*, 2, 158-165.
- Timms, P. (1998). Partnership and Conflict: working relationships between voluntary and statutory agencies providing services for homeless people. En D. Cowan (Ed.). *Housing: participation and exclusion*, 68-83. Aldershot: Dartmouth.
- Tischler, V., Vostanis, P., Bellerby, T. & Cumella, S. (2002). Evaluation of a mental health outreach service for homeless families. *Archives of disease in childhood*, 86 (3), 158-163.
- Vázquez, C., Muñoz, M. & Sanz, J. (1997). Lifetime and 12-month prevalence of DSM-III-R mental disorders among the homeless in Madrid: a European study using the CIDI. *Acta Psychiatrica Scandinavica*, 95, 523-530.
- Vázquez, C. & Muñoz, M. (2001). Homelessness, Mental Health and Stressful Life Events: The Madrid Experience. *International Journal of Mental Health*, 30 (3), 6-25.
- Vázquez, C. & Muñoz, M. (2002). *Entrevista diagnóstica en Salud Mental*. Madrid: Síntesis.
- Warnes, A.M. & Crane, M.A. (2000). The achievements of a multiservice project for older homeless people. *The Gerontologist*, 40 (5), 618-626.
- Winchester, R. & Lloyd, K. (2002). Outreach across the pond. *Community Care*, 4(02), 30-31.
- Witbeck, G., Hornfeld, S. & Dalack, G. W. (2000). Emergency room outreach to chronically addicted individuals. A pilot study. *Journal of Substance Abuse Treatment*, 19 (1), 39-43.
- Zigler, E.F. & Gilman, E.D. (1998). Day care and early childhood settings. Fostering mental health in young children. *Child and Adolescent Psychiatric Clinics of North America*, 7(3), 483-498.