

Job satisfaction of nursing staff in Spanish prisons

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ABSTRACT

Background: There are no available studies assessing job satisfaction amongst nursing staff in Spanish prisons. The aim of this study is to establish overall levels of job satisfaction and determine each of the components.

Method: Cross-sectional and multi-centre descriptive study conducted in Spanish prisons. A Font Roja satisfaction questionnaire adapted by J. Arranz for the study was used to measure degrees of job satisfaction using a Likert's scale. A parametric test was used and a regression model was constructed for predictive ends.

Results: 376 nurses answered the questionnaire (Participation Rate 62.7%; Response Rate 76.7%) 67 centres took part (91.8%). The average satisfaction mark was 2.84 (CL 95%: 2.81-2.87). The lowest ranked components were job variety 1.66 (CL 95%: 1.58-1.74), job-related stress 2.15 (CL 95%: 2.08-2.23) and control over job 2.77 (CL 95%: 2.73-2.82). The highest ranked aspect was job satisfaction, averaging 3.52 (CL 95%: 3.44-3.58).

Conclusions: The average satisfaction mark for prison nursing staff was low when compared to other groups of health care professionals, which implies the need for corrective measures.

Key words: Nursing; Prisons; Job Satisfaction; Multicenter Study; Work; Nursing Staff.

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INTRODUCTION

The work developed by nursing professionals within Prison Health is quite unknown and not very appreciated although essential in providing care to a population which, because of its specific characteristics, is exclusive.

As well as the assistance and care tasks, nurses develop other tasks related to prevention and health promotion, together with hygiene and environmental sanitation activities as a result of which, amongst others, we can currently talk about a provision of health services within prisons with an appropriate care quality. This implies the means by which health services improve the possibility of achieving desired health results for both the individual and the population in accordance with the present professional knowledge¹.

The concept of care quality includes a variety of components such as equity, effectiveness, accessibility, efficiency, the patient's satisfaction and the professional's satisfaction².

The importance of the concept of professional satisfaction lays, from a health services management point of view, in the close relationship between the quality of services provided and the satisfaction of those working to do so and its link with motivation³.

Implementing a comprehensive quality model therefore requires knowing job satisfaction amongst the staff. Although from the point of view of service quality, this does not seem to connect so clearly with assistance quality; it seems that by measuring professional satisfaction, the quality of organization and its internal services is assessed⁴.

The lack of studies on professional satisfaction of nurses within the Spanish prison context, awards this study key interest and we intend, by means of it, to understand at first hand the current situation on this regard. Therefore, our main objectives are assessing professional satisfaction of nursing prison professionals and describing the possible impact of other analyzed variables on this satisfaction.

MATERIAL AND METHOD

Design: It is a descriptive, cross-sectional and multi-centre study developed by filling in a questionnaire.

Study period: It was carried out between October 15th 2007 and February 10th 2008.

Population: The reference population was that of all nurses developing their professional activity

within Spanish penitentiary facilities, including those in Cataluña, whose penitentiary competences are already transferred. This means 600.

We established an only inclusion criterion: voluntary participation.

Measure instruments and procedure: A questionnaire was designed for the gathering of information and since mailing surveys were considered to entail some kind of bias that would misrepresent the results, personal surveying in each facility was chosen. That way, a person was appointed to distribute and collect the questionnaires, which were filled in by each participant.

The questionnaire used to assess job satisfaction was the Font Roja validated questionnaire adapted by J. Arranz⁵, which includes 24 items grouped in 7 factors that intend to explore all those areas defined as components of job satisfaction:

- Factor 1: "Satisfaction at work". It includes those items that imply that the worker is happy with the tasks developed, has a sense of being useful and being acknowledged for the work done.
- Factor 2: "Pressure at work". It refers to the feeling the worker has with regard to the relationship between time and workload.
- Factor 3: "Personal Relationship". It refers to the degree of satisfaction derived from the amount and the quality of social relationships at work.
- Factor 4: "Relaxation at work". It is the ability of switching off from work, from competitiveness, from the salary and the feeling of being able to develop one's tasks.
- Factor 5: "Suitableness for the work". This is the feeling the worker has of being qualified for the job and of developing the work he/she deserves due to their preparation and condition.
- Factor 6: "Control over work". This is the possibility of managing your own work, learning new things and not being altered due to the performance of your profession.
- Factor 7: "Task variety": The feeling a worker may have on the lack of modification of the work from day to day.

The range of answers offered to each question follow a Likert scale. The result obtained in each item corresponds to the simple addition of the results obtained in the sections that each item include, divided by the number of sections. Each of them has valued ranging between 1 and 5, so that higher values entail more satisfaction.

Before the questionnaires were sent, pilot testing was carried out with 30 individuals similar to those who would be included in the sample, to check that the questionnaire worked correctly.

Variables gathered: we can divide them in two groups: descriptive variables of the sample (age, gender, work centre, work experience years and prison work years, continuing education, nurse consultation) and the variables required for the achievement of the objectives (obtained by means of the adapted Font Roja questionnaire, which includes the 7 satisfaction items aforementioned).

Information processing: A database was created with ACCESS 2003, with a protected introduction of data by previous codification of answer fields in order to refine the introduction of data.

Once the database was completed, it was exported to a data file so that it could be processed by the statistic software SPSS version 12.

Once exported, and before any type of calculation was performed, a new data purification process took place, to control the quality of such data by means of four types of techniques:

- Logic and rank tests
- Data consistency tests
- Obtaining the distribution of missing values and other unknown values of all the variables by the procedure MVA (Missing Value Analysis) implemented by version 12 of SPSS.
- Obtaining the distribution of the study's variables to detect unlikely values.

Statistic analysis: it was carried out in three stages:

1. - Univariate analysis: for quantitative variables, averages with confidence intervals of 95% and for qualitative variables, absolute and relative frequencies.

2. - Bivariate analysis: were averages are compared by means of parametric tests such as the Student t test, variance test (ANOVA) and applying the Pearson correlation (r) between quantitative variables.

3.- Multivariate analysis: by the performance of multiple linear regression models and by considering the numeric variable global satisfaction defined by the Font Roja questionnaire as a model dependent variable, and by introducing another range of independent variables in order to establish a predictive model.

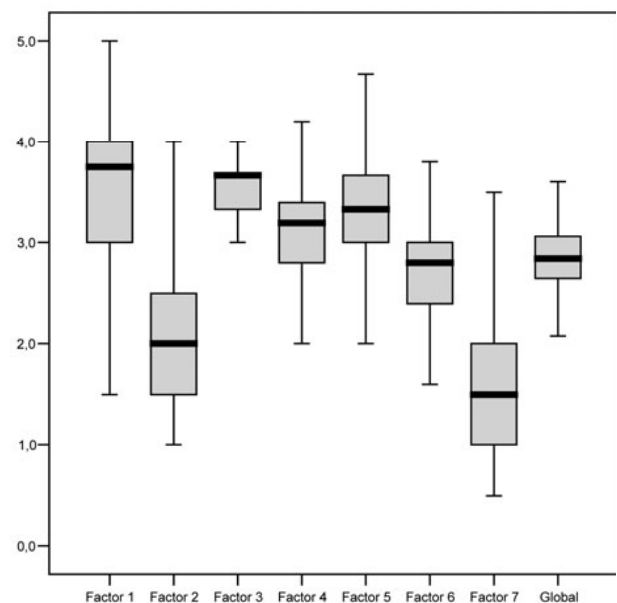
RESULTS

Out of the total population (600 professionals), 114 refused to participate (19.0%) and 110 were un-

able to be contacted (18.8%), so that the final sample for the study was 376 nursing professionals with a participation rate of 62.7% and a response rate of 76.7%. Nurses from 67 penitentiary facilities took part in the study: 91.8% of the country's facilities.

Out of the 376 nurses, 152 (40.4%; 95% C.I.: 35.4 to 45.6) were men and 224 (59.6%; 95% C.I.: 54.4 to 64.6) were women. The average age of the whole sample was 38.1 years (95% C.I.: 37.3 to 39.0). Divided by gender, male average age was 40.4 (95% C.I.: 39.1 to 41.8) and the female average age was 36.5 (95% C.I.: 35.5 to 37.6), so that the average age difference was 4 years older for men ($p < 0.0001$).

The descriptive analysis of all the seven factors included in the Font Roja questionnaire (Figure 1) revealed show results for: Task variety 1.66 (95% C.I.: 1.58 to 1.74); Pressure at work 2.15 (95% C.I.: 2.08 to 2.23); and control over work 2.77 (95% C.I.: 2.73 to 2.82). On the other hand scores were higher with regard to: relaxation at work 3.08 (95% C.I.: 3.24 to 3.13), suitability for the job 3.24 (95% C.I.: 3.18 to 3.30); personal relationships 3.48 (95% C.I.: 3.44 to 3.53) and satisfaction at work 3.52 (95% C.I.: 3.44 to 3.58). According to the gender, women achieve slightly higher scores for satisfaction at work, pres-



Factor 1 = Satisfacción en el trabajo. Factor 2 = Presión en el trabajo. Factor 3 = Relación personal. Factor 4 = Distensión en el trabajo. Factor 5 = Adecuación para el trabajo. Factor 6 = Control sobre el trabajo. Factor 7 = Variedad de la tarea. Global = Índice general de satisfacción.

Figura 1: Puntuación media obtenida en las distintas dimensiones del cuestionario Font Roja.

	Total sample: Average (95% C.I.)	Women: Average (95% C.I.)	Men: Average (95% C.I.)
Factor 1: Satisfaction at work	3.52 (3.44 to 3.58)	3.57* (3.48 to 3.67)	3.43 (3.32 to 3.54)
Factor 2: Pressure at work	2,15 (2.08 to 2.23)	2.23* (2.14 to 2.32)	2.04 (1.91 to 2.17)
Factor 3: Personal relationships	3.48 (3.44 to 3.53)	3.54* (3.48 to 3.60)	3.40 (3.31 to 3.48)
Factor 4: Relaxation at work	3.08 (3.24 to 3.13)	3.12 (3.06 to 3.17)	3.03 (2.96 to 3.11)
Factor 5: Suitableness for the job	3.24 (3.18 to 3.30)	3.26 (3.18 to 3.33)	3.20 (3.10 to 3.30)
Factor 6: Control over work	2.77 (2.73 to 2.82)	2.75 (2.69 to 2.81)	2.80 (2.74 to 2.87)
Factor 7: Task variety	1.66 (1.58 to 1.749)	1.66 (1.56 to 1.76)	1.66 (1.54 to 1.79)
Global Job Satisfaction Index	2.84 (2.81 to 2.87)	2.88* (2.84 to 2.91)	2.80 (2.75 to 2.84)

C.I. Confidence interval. Results of the t Student test (average comparison). When the difference between averages is significant the highest value is marked with * p<0.05; ** p<0.001.

Table 1: Average results for the different items included in the job satisfaction questionnaire distributed for the whole sample and for each gender.

sure at work, personal relationships and the global job satisfaction index (Table 1).

The Global Job Satisfaction Index along with the Font Roja questionnaire scored an average of 2.84 (95% C.I.: 2.81 to 2.87) and had a range between 2.00 and 3.60; its distribution was normal (Kolmogorov-Smirnov Z =0515; p=0,954).Table 2 contains the average scores achieved in the 24 items included in the test.

According to Autonomous Communities we obtained higher average scores in Melilla, Ceuta and Navarra; and the lower scores match Murcia, Asturias and Extremadura, with statistically significant differences (p=0,001). See Figure 2.

The bivariate analysis between some of the features of professionals and global job satisfaction, revealed a significantly higher average score when those polled were: young (r= -0.160; p<0.001), with less work experience years (r= -0.234; p<0.001), with less work experience in the penitentiary context (r=

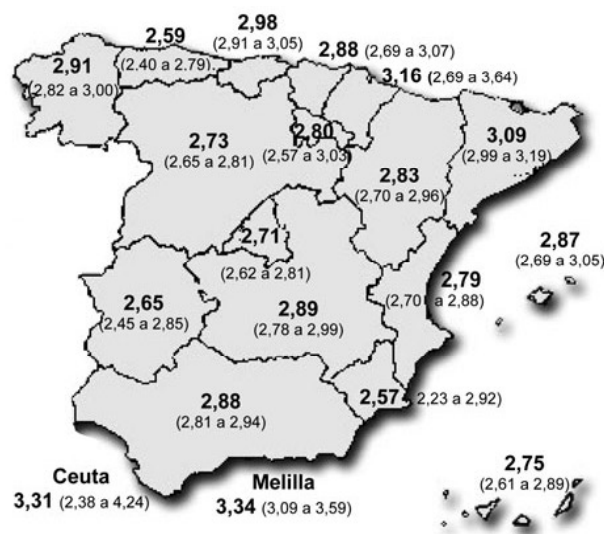


Figure 2. Autonomous Community distribution of average scores of the Global Job Satisfaction Index with a 95% Confidence Interval.

Question	Average	95% C.I.	Dimension
1. – My job is quite repetitive, it has become monotonous.	3.65	3.54 to 3.76	Variety
2. – I am responsible of making decisions.	3.57	3.47 to 3.66	Control
3. – By the end of the day I feel very tired.	3.27	3.18 to 3.36	Control
4. – I am not able to switch off from work when I get home.	3.77	3.67 to 3.86	Control
5. – I have to work thoroughly to get my job done every day.	3.48	3.40 to 3.56	Control
6. – My job has an effect on my mood.	2.93	2.81 to 3.05	Control
7. – I am satisfied with my job.	3.18	3.06 to 3.29	Satisfaction
8. – I am independent to organize my job.	3.51	3.40 to 3.62	Relaxation
9. – I have the opportunity of learning new things.	2.46	2.36 to 2.56	Relaxation
10. – I am interested in the tasks I perform.	3.34	3.24 to 3.43	Satisfaction
11. – I feel that what I do is not worth it.	2.82	2.70 to 2.93	Satisfaction
12. – I am acknowledged for my job.	2.51	2.41 to 2.61	Relaxation
13. – The relationship with my boss is friendly.	3.61	3.51 to 3.71	Relation
14. – The relationships with my colleagues are friendly.	4.04	3.96 to 4.12	Relation
15. – The salary is appropriate.	2.80	2.69 to 2.90	Relaxation
16. – I have the job I deserve.	4.30	4.21 to 4.38	Satisfaction
17. – I have plenty of promotion possibilities.	1.51	1.43 to 1.59	Relaxation
18. – I haven't got enough time to do my job.	2.68	2.57 to 2.78	Pressure
19. – I know what people expect from me at work.	3.25	3.14 to 3.35	Relation
20. – I think my work is excessive.	2.85	2.76 to 2.95	Pressure
21. – My colleagues problems' upset me.	3.60	3.51 to 3.70	Variety
22. – I frequently feel I am not qualified for my job.	1.86	1.76 to 1.95	Suitableness
23. – I haven't got enough resources to perform my job.	3.17	3.09 to 3.26	Suitableness
24. – Competitiveness stresses me.	1.83	1.72 to 1.93	Suitableness

Table 2: Average of each of the Font Roja questionnaire items and equivalent dimension.

-0.233; $p < 0.001$), with less inmates within their workplace ($r = -0.217$; $p < 0.001$).

Those professionals who were more satisfied were women, with previous work experience in penitentiary facilities, took continuing education courses and, at least once a year, provided programmed nurse consultation services in their facility.

Tables 3 and 4 depict the relationship between the variables which were significant in the previous

analysis (age, gender, work experience, prison work experience, previous experience to the penitentiary work, taking training courses and providing nurse consultation services) and the 7 items of the job satisfaction questionnaire.

The multivariate analysis with linear regression was not able to build a model with enough predictive ability for the average global satisfaction ($R^2 = 0.146$ y 0.127).

	Satisfacción laboral	Presión en el trabajo	Relaciones personales	Distensión en el trabajo	Adecuación para el trabajo	Control sobre el trabajo	Variedad de la tarea	Índice Global
Edad	-0,233**	-0,285**	-0,038	-0,114*	0,090	0,128*	0,000	-0,160**
Años de experiencia profesional	-0,195**	-0,348**	-0,040	-0,148**	0,043	0,072	-0,075	-0,234**
Años de experiencia penitenciaria	-0,216**	-0,333**	-0,041	-0,138**	0,076	0,079	-0,105*	-0,233**
Número de internos en el centro	-0,154**	-0,056	-0,144*	-0,087	-0,100	-0,197**	-0,062	-0,217**
Nº de centros distintos donde ha trabajado	-0,151**	-0,092	-0,007	-0,074	0,044	0,092	-0,010	-0,074

Resultado de las pruebas estadísticas de correlación de Pearson. * p<0,05 ; ** p<0,001.

Tabla 3: Relaciones entre las características profesionales cuantitativas y las distintas dimensiones del cuestionario de satisfacción laboral.

FALTA TRADUCCIÓN

	Satisfacción laboral	Presión en el trabajo	Relaciones personales	Distensión laboral	Adecuación laboral	Control del trabajo	Variedad de la tarea	Índice Global
Sexo								
Mujer	3,57*	2,23*	3,54*	3,12	3,26	2,75	1,66	2,88*
Hombre	3,43	2,04	3,40	3,03	3,20	2,80	1,66	2,80
Experiencia Laboral previa								
Sí	3,54*	2,17	3,50*	3,09	3,24	2,76	1,67	2,85*
No	3,22	2,00	3,31	3,07	3,13	2,90	1,50	2,73
Formación continuada								
Sí	3,66**	2,21	3,51	3,14*	3,26	2,76	1,75*	2,90**
No	3,32	2,08	3,44	3,00	3,20	2,80	1,54	2,77
Consultas programadas								
Sí	3,60*	2,18	3,51	3,11	3,27	2,79	1,75*	2,89**
No	3,37	2,11	3,44	3,05	3,18	2,75	1,51	2,77

Los resultados de las pruebas estadísticas con dos muestras independientes para variables categóricas son medias. Cuando la diferencia de medias es significativa el valor más alto se muestra con la significación estadística: * p<0,01 ; ** p<0,001.

Tabla 4: Relaciones entre las características profesionales cualitativas y las distintas dimensiones del cuestionario de satisfacción laboral.

FALTA TRADUCCIÓN

DISCUSSION

On the whole, in our country, job satisfaction of penitentiary nursing staff is slightly lower than that of other health professionals, both within the primary care context^{3, 6} and the hospital care context^{7, 8}. The degree of satisfaction decreases as the age, the work experience and the seniority increase; something whi-

ch is hardly surprising if we consider that there are no promotion or acknowledgement measures within the penitentiary context, unlike within other contexts where there is a professional career acknowledging such experience and seniority in accordance with the legal regulations in our country. Likewise we find a low index for monotony, task control and pressure at work, something which agrees with other published

studies' that state that nursing in prisons is generally not too stressing. Notwithstanding this fact, it is an activity with no initiative from professionals to organize and manage their own work and quite monotonous, something which contributes powerfully to the reduction in the global job satisfaction index. On the whole, there is a certain indifference towards the salary or the competitiveness amongst colleagues, they feel suitable and qualified for the job performed, and there are good relationships between them unlike other workplaces, as stated by other published studies⁹.

One of the possible limitations of this study is the fact that voluntary participation may entail some kind of bias. Nevertheless we consider that this possible bias is considerably played down by the high participation and response rates.

On the other hand, we consider that this study is quite descriptive of the nursing community within our country, due to the fact that almost all the facilities of all autonomous communities have taken part in it.

Amongst some of the consequences of job dissatisfaction we can find the increase in work absenteeism and the number of accidents at work, both of which explain why prevention services within businesses are so keen in knowing the degree of satisfaction among their employees. The global job satisfaction rate concluded is acceptable, but taking into account the special features of the prison context such as professional isolation and those of the population attended (lack of healthy habits, extreme morbidity of infectious and psychiatric diseases, aggressiveness, etc.) public administrations are forced to implement support measures for their staff in order that such rate is increased and never drops. Among such measures it is worth considering:

- The creation of a professional career as a means of promoting nursing work within prisons.
- The development and organization of tasks requiring active participation from nursing staff such as: the establishment of action protocols drafted by the staff themselves, the participation in nursing consultations and in clinical sessions.
- Better promotion of continuous training of the staff.
- Promoting the participation of nurses in research tasks.

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BIBLIOGRAPHY

1. Committee to Design a Strategy for Quality Review and Assurance in Medicare. Medicare. A strategy for quality assurance. Lohr KN editor. Institute of Medicine. Washington, DC: National Academy Press, 1990.
2. Sociedad Española de Médicos de Atención Primaria SEMERGEN [Página principal en Internet] Madrid: Modelos de calidad asistencial en atención primaria. Desarrollo y aplicación de la calidad asistencial en atención primaria. Opinión de la administración. Disponible en: <http://www.semergen.es/semergen2/microsites/opinion/opinion5/desarrollo.pdf>
3. Sobrequés J, Cebriá J, Segura C, Rodríguez C, García M, Juncosa S. La satisfacción laboral y el desgaste profesional de los médicos de atención primaria. *Aten Primaria* 2003; 31:227-33.
4. Fernández MI, Moineo A, Villanueva A, Andrade C, Rivera M, Gómez JM, et al. Satisfacción laboral de los profesionales de atención primaria del área 10 del Insalud de Madrid. *Rev Esp Salud Pública* 2000; 74:139-47.
5. Aranaz J, Mira J. Cuestionario Font Roja. Un instrumento de medida de la satisfacción en el medio hospitalario. *Todo Hosp* 1988; 52:63-66.
6. Olivar C, González S, Martínez MM. Factores relacionados con la satisfacción laboral y el desgaste profesional en los médicos de atención primaria de Asturias. *Aten Primaria* 1999; 24:352-9.
7. López F, Bernal LYC. Satisfacción laboral de los profesionales en un hospital comarcal de Murcia. *Rev Calidad Asistencial* 2001; 16:243-6.
8. Ignacio E, Córdoba JA, Serrano A, Figueroa E, Moreno J, Ignacio JM. Factores asociados a la satisfacción de los profesionales en los hospitales públicos andaluces. *Todo Hosp*. 1997; 141:7-12.
9. Anglada N, Ledesma E. Satisfacción de Enfermería de Atención Primaria en las comarcas del Alt y Baix Empordà. *Aten Primaria* 2000; 25:326-30.