

## Working Environment In Nursing: Needs Improvement?

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**Background:** Knowing the quality of life of professionals is important because it is related to job performance, better results, and greater productivity, which results in better patient care.

**Objective:** To know the Professional Quality of Life perceived by the nurses at the Geriatric Hospital of Toledo (Spain).

**Method:** A descriptive cross-section study was employed to measure the Professional Quality of Life of all healthcare nurses (69 in total) at the Geriatric Hospital of Toledo. The questionnaire used as a measuring instrument was the Professional Quality of Life - 35. The data obtained was analyzed by means of: descriptive statistics, single-factor ANOVA variance analysis, T Student tests, and simple and multiple regression analysis.

The study was approved by both the research commission and the ethics commission at the Hospital Complex of Toledo. Participation in the study on behalf of the nursing staff was voluntary.

**Results:** In total, 45 responses were obtained (65.2%). The overall mean score measured the perceived Professional Quality of Life to be low. In relation to the three dimensions evaluated in the study, the highest average found was in “intrinsic motivation,” followed by “workload”, and then “management support.” In the multivariate analysis, “management support” was shown as the most influential factor in the Professional Quality of Life with a 23% influence ( $P < 0.001$ ), followed by workload with 9% ( $P = 0.01$ ).

**Conclusions:** The professionals at the participating center perceive their workplace as having an elevated degree of responsibility, a large quantity of work, a high occurrence of rushes and fatigue, and all this with little support on behalf of management. Promotions are scarce or the policies for receiving a promotion are inadequate. The perception of Professional Quality of Life in nursing is low. The obtained results indicate a need for an organizing cultural change based on participation, motivation, and increased management support.

**Key Words:** Work satisfaction, nursing, hospital, care

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## Introduction

The theory that people are the main active component of organizations is fulfilled in a special manner in the case of healthcare organizations. It can be affirmed that the quality of the services offered in healthcare organizations is directly related to the satisfaction of the professionals of which they are composed (Varo 1995; Sibbald, et.al. 2000). In the most influential conceptualization of quality of health care services, Donabedian affirmed that the satisfaction of working professionals is as much a casual factor of good medical attention as it is a predictor of the amount of care in the attention given (Donabedian 2007).

The improvement of job satisfaction and the living conditions of workers should be an aim of not only organizations in general, but of healthcare organizations in particular given that it is imperative to guarantee a continuous investment in its human capital, and as a result, in the best quality of services offered (Porter, Steers 1973; Sibbald et.al. 2000).

There is also a relationship between dissatisfaction and absenteeism, occupational accidents, aggression, changes in job position and one's perception of the Quality of Professional Life (Porter, Steers 1973; Fernandez et.al 1995).

In relation to the quality of life of one's job there are two habitually used terms; occupational stress and *burnout* syndrome. Occupational stress was defined by McGrath in 1970 as the perceived imbalance between demand and the individual's ability to respond, under conditions where failure to meet said demand implies important consequences (Cabezas 2000). *Burnout* syndrome makes reference to fatigue, depersonalization and low professional achievement, which can emerge especially in professionals that work with people. It was described for the first time in 1974 (Freudenberg 1974; Maslach et.al 2001). This syndrome is a specific result of chronic occupational stress that usually appears in professionals who maintain a relationship of constant and direct support with others while withstanding a lasting and heavy workload, and typically coincides with the placement of considerable expectations and dedication to one's job. Over time, these professionals suffer from symptoms of emotional tiredness, depersonalization and a lack of personal achievement. Among the variables associated with this situation, environmental factors, individual characteristics, coping characteristics, previous results of stressful experiences and consequences of the particular situation for the individual are also signaled in the development of *burnout* syndrome (Cabezas 1998).

Occupational stress, *burnout* syndrome and their impact have been measured on numerous occasions in nursing (Koivula, Paunonen, Laippala 2000; Clegg 2001; Vahey et.al.2004; Wu et.al.2007; Nayeri et.al.2009). Both occupational stress and *burnout* syndrome directly influence both the satisfaction of the professional as well as the perceived of the quality of life of the job he or she holds. Presently, the Quality of Professional Life is gaining importance with the psychological component of organizations as an object of study. It is considered a highly esteemed dimension and a key objective in organizational discourse (Meliá; Peiró, 1989). The Professional Quality of Life relates to professional satisfaction, which refers to the degree of well being that a person experiences while performing job functions. On the other hand, Professional Quality of Life is additionally defined as the feeling of well being that is derived from the individual's perceived balance between the demands or burden of the profession, and the resources (psychological, organizational and others) that are available to meet these demands. As such, the worker needs to achieve his or her optimal development within the professional, personal, and familial spheres to be able to discuss Professional Quality of Life (Cabezas 2000).

Currently within the healthcare environment, very few enactments of healthcare policy recognize the strategic importance of improving the satisfaction of healthcare professionals. The objective of the present study is to become familiar with the Professional Quality of Life as perceived by the nursing staff of the Geriatric Hospital Virgen del Valle of Toledo, Spain. It also attempts to recognize the relationship between management support, intrinsic motivation, and workload with one's perceived overall quality of life. Moreover, the study intends to identify which factors influence the variation in overall Professional Quality of Life.

## **Material and Methods**

This was a descriptive cross-sectional study. Study Setting at Geriatric Hospital Virgen del Valle of Toledo (Spain). The Hospital Virgen del Valle is a provincial, governmental geriatric hospital. It has 140 beds and includes all levels of geriatric care. The study was approved by both the research commission and the ethics commission at the Hospital Complex of Toledo.

Study Population was all hospital nurses (BSN), 69 in total. All nurses whom, on January 1, 2010 held indefinite, long-term intern, limited duration or other contracts. Supervisors were

excluded the study as they do not have the burden of care, and because they have different working hours. Furthermore, they are classified as middle managers as they are considered to have a different working life than nurses.

The instrument for measuring Professional Quality of Life (PQL) was the questionnaire Professional Quality of Life-35 (PQL-35). This questionnaire was constructed based on the demand-control model formulated by Karasek and has been validated in the Spanish language (García 1993; Cabezas 2000; Martín et.al. 2004). The PQL 35 questionnaire consists of 35 questions whose responses are given on a scale of 1 to 10 (between none and a lot, where “none” is values 1 and 2, “somewhat” is values 3, 4, and 5, “sufficient” is values 6, 7, and 8, and “a lot” is values 9 and 10). The questions are grouped into three dimensions: “management support” (12 items), “workload” (12 items), and “intrinsic motivation” (10 items). One question does not fit into these categories, which is a summary measurement of the perception of PQL. The scales of each dimension have a very acceptable internal consistency (Cronbach’s Alpha between .75 and .86).

An anonymous questionnaire, along with a letter explaining the study was distributed within the workplace in a sealed envelope. The survey was given to the nurses personally by those responsible for the data collection. The data obtained was analyzed by means of descriptive statistics, single-factor ANOVA variance analysis, T Student tests, and simple and multiple regression analysis.

## **Results**

Table 1 shows the gender, civil status, and employment situation of those who responded, 88.9% of which were female and 11.1% male. The greatest percentage of the sample (29%) was found to be between the ages of 25-30. Of those who responded the largest percentage had between 1 and 6 years of experience working in geriatrics. The subjects had worked in hospitalization units 82.2%, 6.7% in consultations, and 11.1% in other services (pharmacy, laboratory, radiology unit).

Tabel 1. Socio-demographic and occupational data of participants

	<b>N</b>	<b>%</b>
<b>Sex</b>		
male	5	11,1
female	40	88,9
Total	45	100
<b>Age (years)</b>		
< 25	2	4,4
25 - 30	13	28,9
31 - 35	8	17,8
36 - 40	4	8,9
41 - 45	6	13,3
46 - 50	9	20,0
51- 55	3	6,7
Total	45	100
<b>Employment situation</b>		
indefinite contract (pub.sector worker)	21	46,7
limited duration contract	2	4,4
long-term intern	13	28,9
others	9	20,0
Total	45	100
<b>Workplace</b>		
hospitalization unit	37	82,2
consultations	3	6,7
others	5	11,1
Total	45	100
<b>Nursing experience (years)</b>		
0 - 9	21	46,7
10 - 20	14	31,1
21 - 33	10	22,2
Total	45	100
<b>Time worked in geriatrics (years)</b>		
< 0,5	6	13,3
0,5 – 1	4	8,9
2 - 5	12	26,7
6 - 10	8	17,8
11 - 15	4	8,9
16 - 20	3	6,6
> 20	8	17,8
Total	45	100

The overall average score of the perceived PQL was 5.29. In relation with the three evaluated dimensions, the highest average was found in ‘intrinsic motivation’ at 7.09,

“workload” with an average of 6.56, and finally the dimension with the lowest average being “management support” with an average of 5.59 (Table 2).

*Table 2 Results of the questionnaire dimensions: management support, workload, and intrinsic motivation, and quality of professional life.*

	Mean	Standard Deviation	Variance
Management support factor	5,1197	1,21632	1,479
Workload factor	6,5636	1,38477	1,918
Intrinsic motivation factor	7,8617	0,81449	0,663
Quality of Professional Life	5,2913	2,35120	5,528

The results of the ANOVA variance and the T Student tests indicate the following discoveries: There were no significant differences in the relationship between age and overall perception of PQL, nor were there any when taking into account any of the three dimensions of the study (“workload”, “management support”, and “intrinsic motivation”).

Examining employment situation and amount of time working in geriatrics also yielded no significant differences in the evaluation of PQL, nor did any significant differences arise upon evaluating these aspects with the three individual dimensions of PQL. Upon studying the perceived PQL, significant differences were found in regards to workplace. Surveyed nurses who worked in the hospitalization unit gave quality of work life a lower score ( $4.84 < 7.40$ ,  $P = .018$ ) than those who worked in “others” (pharmacy, laboratory, radiology etc.). It is important to note that not only was it valued lower than other items, but the value itself it quite low.

Concerning the relationship between the duration of time one has worked as a nurse and his or her perceived PQL, “management support” and “workload” held no relationship. However, there were significant differences with respect to “intrinsic motivation” ( $P = .015$ ). The nurses with between 21-33 years of experience scored highest in “intrinsic motivation,” while the nurses who scored lowest were those with between 10-20 years of experience ( $8.16 > 7.35$ ,  $P = .015$ ).

Furthermore, studying workplace characteristics revealed significant differences in regards to one’s intrinsic motivation. Subjects who worked in the hospitalization unit scored

lower in “intrinsic motivation” than those who worked in “other services” (7.44 < 8.82; P = .005). There were no significant differences regarding “management support” and “workload” when considering one’s workplace.

The questionnaire items which held the lowest scores were: “my business tries to improve the quality of my position” at 3.49 (SD 2.107), “I receive information about the results of my work” at 3.89 (SD 2.308), “possibility of promotion” at 3.58 (SD 2.33), “conflicts with others” at 3.67 (SD 2.541), “recognition of my effort” at 3.82 (SD 2.037). All of these items belong to the “management support” dimension of the questionnaire, except for the item “conflicts with others,” which comes from the “workload” dimension.

The questionnaire items that held the highest scores were “my job is important to the lives of others” at 9.18 (SD 0.936), “I am capable of doing my current job” at 9.00 (SD 0.977), “necessary ability to do my job” at 8.56 (SD 1,455), “familial support” at 8.49 (SD 1.926) “I feel proud of my work” at 8.29 (SD 2.018), “amount of work that I have” at 7.93 (SD 1.250), and “stress” at 7.36 (SD 2.395). All of these items belong to the “intrinsic motivation” dimension of the questionnaire, except for the item “stress,” which belongs to the “workload” dimension (Table 3).

Table 3. Description of mean, standard deviation, and variance

Questionnaire item	Mean	Standard Deviation	Variance
<b>1. Factor: Management support</b>			
Possibility of promotion	3, 58	2,331	5,431
My business tries to improve the quality of life of my job	3,49	2,107	4,437
Satisfaction with salary	5,69	1,869	3,492
Recognition of my effort	3,82	2,037	4,149
I receive information about the results of my work	3,89	2,308	5,328
It is possible that my suggestions are heard and applied	5,42	2,509	6,295
Possibility to be creative	4,84	2,067	4,271
Support from my superiors	5,22	2,679	7,177
I have autonomy or freedom to make decisions	5,38	2,434	5,922
Possibility to express my thoughts and needs	5,89	2,534	6,419
Variety in my job	5,56	2,302	5,298
Support of my coworkers	7,67	2,226	4,955

<b>2. Factor: Intrinsic motivation</b>			
Support of my team	6,87	2,430	5,904
Satisfaction with job type	6,11	1,910	3,646
Motivation (will to exert myself)	6,78	2,152	4,631
Desire to be creative	6,96	2,246	5,043
I feel proud of my work	8,29	2,018	4,074
Necessary ability to do my current job	8,56	1,455	2,116
My work is important to the lives of others	9,18	0,936	0,877
Familial support	8,49	1,926	3,710
I am capable of doing my current job	9,00	0,977	0,955
<b>3. Factor: Workload</b>			
Amount of work that I have	7,93	1,250	1,564
Hurries and fatigue caused by lack of time to do my work	7,38	2,631	6,922
Burden of responsibility	8,62	1,556	2,422
Stress (emotional exertion)	7,36	2,395	5,734
Pressure that I receive to maintain my quantity of work	6,80	2,262	5,118
Pressure received to maintain the quality of my work	6,80	2,180	4,755
Bothersome interruptions	6,22	2,645	6,995
My job has negative consequences for my health	6,51	2,727	7,437
Lack of time for my personal life	5,62	2,741	7,513
Physical discomfort at work	5,29	2,474	6,119
Conflicts with others at work	3,67	2,541	6,455
Disconnect at the end of the workday	6,27	2,824	7,973
<b>Quality of Professional Life</b>	<b>5,29</b>	<b>2,351</b>	<b>5,528</b>

A

linear regression analysis was performed to examine the influence of each dimension on the overall PQL. It was found that the overall PQL “management support” is 38% ( $P < .001$ ), for “workload” is 20% ( $P < .01$ ), and for “intrinsic motivation” is 13% ( $P = .02$ ). Analyzing the joint influence of the dimensions of PQL through multiple regression analysis explained 47% of the variance obtained ( $P = .01$ ). “Management support” was shown as the most influential factor in the PQL with a 23% influence ( $P < .001$ ), followed by workload with 9% ( $P = .01$ ). The dimension “intrinsic motivation” did not significantly contribute in the explanation of the overall PQL.

The results of the multiple regression analysis of the PQL established that the items “my job has negative consequences for my health” (33.44% ( $P < 0.001$ )), “my business tries to improve the quality of life of my job” (22.15% ( $P < 0.001$ )), “my duties are clear” (31.7%

( $P < 0.001$ )), and “disconnect at the end of the workday” (15.5% ( $P = 0.01$ )) explains 70% of the total variance of the overall quality of professional life ( $P < 0.001$ ). No other item contributed any additional significant information.

## **Discussion**

The percentage of responses received (65.2%) has adequately served the objectives of this study and follows suit with other studies done within the healthcare environment (García 1993; Fernandez 2000; Sibbald et al 2000; Cabezas 2000; Alonso, Iglesias, Franco 2002 ;Cortés et al 2003;). Although an acceptable response rate was obtained, the causes of a “no answer” response remain unknown when dealing with anonymous questionnaires. However, we cannot disregard the existence of a tendency towards “no answer.” Furthermore, if it is taken into consideration that those individuals who are least satisfied with the quality of professional life may not have responded to the survey, one must also consider that the obtained results could in fact show a higher rate of satisfaction than reality.

### *Professional Quality of Life*

The perception of one’s own overall PQL is low in nurses, reaching a mean of just 5.29, which only corresponds to a “somewhat” quality of life according to the PQL -35. This variable is directly related to the job satisfaction of working professionals, and similar results have been found in other studies as well (Goñi 2008; Martín 2004). Additionally, examining the PQL uncovered significant differences in regards to the workplace of those surveyed. Nurses who work in the hospitalization unit placed a lower value of the PQL ( $P = 0.018$ ) than those who work in “other services” (pharmacy, laboratory, radiology). This discovery could be related to the work shifts that the hospitalization unit uses, as well as the working hours of the morning shift for those employed in “other services,” that in turn has repercussions in one’s perception of the PQL.

### *Management Support*

Most of the lowest scores were found within the “management support” dimension. The item with the lowest average was “my business tries to improve the quality of life of my job” at 3.49 (SD 2.107). The perception that the business does not attempt to improve the quality of life for its employees would demand a reorientation of the managers’ interest towards the needs of

not only the workers but also those who receive care services. Management skills should be improved, as well as communication and feedback between managers and employees.

Occupying the second position among the items that scored most poorly is “possibility of promotion,” averaging at 3.58 (SD 2.33). The de-motivating effect of the existence of a “professional ceiling” has been clearly demonstrated in nursing professionals in the United States (Keith, Coburn, Mahoney 1998). The low scoring of promotional possibility coincides with the findings of other studies (Keith, Coburn, Mahoney 1998; Tzeng 2002;) and reflects the perception that professionals have of a healthcare system that favors stagnation and does not promote professional competency. For nurses, promotions and opportunities to move up in the business are very limited and lack transparency, which often means the individual simply awaits recognition for the work he or she has done, and that promotions are only a means of gratification. As such, promotions are related to one’s personal values and aspirations, as well as his or her perception of equity and justice, and it is because of this relationship that promotions hold such a large influence on job satisfaction (Parra, Paravic 2002). Following the same pattern, another related discrepancy is unveiled in the scores received by questionnaire items “desire to be creative” and “possibility to be creative,” which averaged at 6.96 (SD 2.24) and 4.84 (SD 2.06), respectively.

These results can be associated with the absence of recognition of the not only the degree of professional development one has attained, but also his or her competency, formation and related activity, the culmination of which in Spain is called one’s “professional career.” Because some of the management activities within institutions are delegated based on this frequently overlooked “professional career,” this kind of promotional discrimination leads to dissatisfaction with one’s occupation. Studies also show that among nurses, the lack of promotional possibilities is one of the aspects that produce the most dissatisfaction with the job (Courtney, Yacopetti, Walsh, 2001; Finn 2001).

The items “recognition of my effort” and “I receive information about the results of my work,” which averaged at 3.82 (SD 2.037) and 3.89 (SD 2.308), respectively, were also found to be among the lowest scoring on the questionnaire. This result could be interpreted as though nurses were not being duly recognized for performing a job that entails such a high level of ability and complexity. All of the information concerning the negative aspects of employment

and the lack of recognition of one's personal work have been noted before by other authors (Sibbald et.al.1998; Cabezas 2000) and are related to dissatisfaction, fatigue, and strain at work.

The low scores obtained in the management support factor presents a group of professionals that do not perceive that their healthcare organization meets their professional needs of participation, creativity, and recognition.

### *Intrinsic Motivation*

On the contrary, the items that obtained the highest score were those related with "intrinsic motivation". The specific items that scored highest were: "my work is important to the lives of others" at 9.18 (SD 0.936), "I am able to do my current job" at 9.00 (SD .0977), "necessary ability to do my job" at 8.56 (SD 1.455), "familial support" at 8.49 (SD 1.926), "I feel proud of my work" at 8.29 (SD 2.018), and "stress" at 7.36 (SD 2.395). These results are similar to those found in other studies (Tzeng 2002; Cortés et.al. 2003; Sanchez 2003;).

The elevated perception of "intrinsic motivation" has been observed on many occasions, also with the use of measuring instruments (Fernández et.al. 2000). A possible "ceiling effect" can be detected within the items in this dimension. Such a positive self-evaluation of one's capacity for the current job can be interpreted as positive as long as it is not accompanied by the idea that one does not need to improve on this capacity.

The differences found in the scoring of "intrinsic motivation" and "experience working as a nurse" do not resemble the general opinion that the youngest are the most motivated within organizations. According to this study, those who least value intrinsic motivation are the nurses with between 10 and 20 years of work experience ( $P = .015$ ).

The differences found in the scoring of "intrinsic motivation" and "workplace" indicates that the nurses who placed the least value on "intrinsic motivation" are those who work in the hospitalization units ( $P = .005$ ). Other studies have not encountered similar results. This discovery could be explained by taking into account how factors such as old age, multiple pathologies, high degree of dependency and high mortality rate of patients influence the level of motivation of the nurses who work in the geriatric unit.

### *Workload*

The item “conflicts with others at work” received the lowest score within the “workload” factor, with an average of 3.67 (SD 2.541). The low score regarding conflicts is not in suit with other studies, in which it was found that satisfactory interaction at work generated job satisfaction (Nakayama, Aohda, Katahira 1997; Adams 2000;. Chaboyer et.al. 2000).

The dimensions that obtained a high score were “amount of work that I have,” “burden of responsibility,” “stress,” and “rushes and fatigue caused by lack of time to do my work.” The conditions of a quality work life, the presence of a pleasant work environment, and a satisfactory level of mental health diminish the occurrence of accidents and profession-related ailments. Moreover it is necessary to lend attention to the topic of overly heavy workloads, since excessive pressure from too one’s caseload clearly leads to an increased risk of developing *burnout* syndrome (Pla, Hernández 2002; Sánchez 2003).

It has been demonstrated that the quality of professional life is negatively impacted when one’s caseload is increased, included when it is compensated with economic incentives (36). As such, an overly heavy workload has been identified as a common cause of demoralization and dissatisfaction among professionals (Smith 2001; Huby et.al.2002).

The item “quantity of work that I have” received the second highest score with an average of 7.93 (SD 1.25), which would support the subjective perception about a shortage of staff. However, when the whole of the “workload” dimension is not found to be above seven, a staff increment would not be justified (Sánchez 2003). In the current study, the scoring of the “workload” factor is 6.56, making it necessary to more deeply analyzed how the peaks in patient traffic are being approached throughout the workday to confirm this extreme. Other studies have demonstrated a negative relationship between workload and PQL (Sánchez 2003). This study comes to support this hypothesis upon encountering a negative correlation between workload and PQL.

In terms of the limitations of the study, there may be inherent informational tendencies of the measuring instrument itself when evaluating an abstract concept such as satisfaction. Another limitation of our study is because the questionnaire that was used can only measure perceptions with validity, but does not serve to measure the expectations of workers. Although the knowledge of these expectations could be more important when the time comes to make

decisions, we believe that the results obtained can help to recognize the situation in which the participating nurses find themselves.

The PQL-35 questionnaire is a useful tool that has already demonstrated its reliability and validity in other studies (Cabezas 2000). Furthermore, other questionnaires are even more related to the concepts of occupational stress and *burnout* (Maslach , Schaufeli, Leiter 2001), while the PQL-35 most closely examines the concept of the Quality of Professional Life that was researched in this study.

## **Conclusion**

The emerging conclusion is that the professionals at the participating center perceive their workplace as having an elevated degree of responsibility, a large quantity of work, a high occurrence of rushes and fatigue, and all this with little support on behalf of management. These findings demonstrate that professionals perceive that their managers do not afford them the necessary amount of support. The perception of PQL in nursing is low.

However, some of the professionals were found to have not only high motivation and ability, but also significant familial support and pride in their work. It is of vital importance to improve and optimize the job factors that are identified as influential to the PQL , and in this way, achieve a more comfortable working environment and more accessible and equitable promotional possibilities, both of which will directly influence the Quality of Professional Life and the quality offered to patients.

To improve the perception of the PQL, perception of management support must be improved and workloads must be decreased. This study could provide tools to achieve this adjustment. One can compare changes in the perception of PQL that could be produced by distinct and clear recognition of a professional's chosen course for his or her working life in relation to this person's competence, academic formation and activity throughout this process (or "professional career," as it is called in Spain). Additional comparisons of the changes in PQL could be observed and provoked through the use of other forms of promotion and recognition, as well as through improvements in communication and feedback between managers and staff. Moreover, one could also see how the PQL is affected by an increase in the nurses' autonomy in decision-making (decentralized management, fixed objectives).

It also must be noted that the employment of these instruments used to measure the perception of the Quality of Professional Life should be as much a habitual practice as the use of customer satisfaction surveys, since both serve to increase one's understanding of the workers' general opinion in relative with his or her business and its PQL. The underlying objective of each is to introduce corrective mechanisms that prevent professional fatigue, one of the current problems in our healthcare system today.

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