The quality of life of health professionals working in the prison system

Abstract This study aimed to evaluate the Quality of Work Life (QWL) of health professionals in prisons and identify QWL-associated factors. This is an exploratory, descriptive and cross-sectional survey conducted in five prisons. The study included 29 health professionals, who answered the TQWL-42 questionnaire. Results were obtained through descriptive statistics and multiple linear regressions. QWL was higher among women, younger workers, professionals with incomplete higher education or who have been working at the prison for 4 to 6 years. QWL overall assessment was 69.55 points. We observed that variables gender and education and biological/physiological and environmental/organizational spheres are associated with the overall assessment of QWL.

Key words Job satisfaction, Quality of life, Work, Health professionals, Prisons
Introduction

The development of studies on aspects of Quality of Life (QoL) stems from the need to understand the multiple factors underpinning human beings and how each factor interferes in the representation of total well-being. The gradual growing number of research and interest in the subject motivated the World Health Organization (WHO) to form a study group, which defined QoL as “individuals' perception of their position in life in their own culture and system of values and in relation to their objectives, expectations, standards and concerns”.

Initially, QoL was interrelated to health and, in many cases, used as synonym. Currently, health is determined socially, thus, understood from individual determinants – such as gender, sex and genetic factors – to macro determinants – such as living and working conditions – health then started to include work, in order to obtain better levels of QoL. In addition, work is directly related to the health conditions and quality of life of professionals and exerts influence in the other people involved in this process.

When considering the need to understand the relationship between QoL and work, the Quality of Work Life (QWL) approach was established. An exponent in the topic, scholar Walton defines QWL as “based on the work humanization and social corporate responsibility, which involves understanding the needs and aspirations of individuals, through the restructuring of job design and new ways of organizing work, coupled with a formation of work teams with greater power of autonomy and improvement of the organizational environment”.

Thus, work is described as a social activity, which exerts on workers the function of forming identity and personal development. However, even if work is considered as one of the central axes in the lives of most people, we should note the difficult task of workers in reconciling quality of life and work activities, especially when workplaces are Brazilian prisons, since it is important to emphasize that the physical structure destined to the accomplishment of labor activities interferes in the health and satisfaction of workers.

Health work was introduced in Brazilian prisons after the publication of the National Prison System Health Plan in 2005 and, currently, with the National Comprehensive Care Policy for Persons Deprived of Liberty in the Prison System (PNAISP), published in 2014, which includes a health facility within prisons, with a multidisciplinary team consisting of a physician, nurse, nursing technician, dentist, dental assistant, psychologist and social worker, in which its composition is adequate to the number of people present in the facilities.

According to the PNAISP, the work process of health professionals should aim at including convicts in the Unified Health System (SUS), the implementation of care based on intersectorality, the organization of health systems, regionalization, universality, equity, integrality, resolvability of care and respect for citizenship, with a view to recognizing the various health issues that arise from the situation of confinement.

However, the national prison setting jeopardizes the biosafety and safety of professionals, and these still perform their work activities facing recurrent problems of working in the SUS. When articulated, this context is an obstacle to work performance, it compromises QoL of professionals in these places while generating occupational stress.

In Paraíba, the physical conditions of health establishments are also not adequate for work. In a research carried out, we observed that nursing and pharmacy offices had inadequate evaluations regarding the physical area, lighting, ventilation and noise, in which the latter had the worse evaluation. In addition, there is insufficient material for small surgeries and blocks of prescriptions.

In view of the reflected aspects, studies that propose to evaluate the QWL can apprehend essential elements in the working environment, subsidizing the establishment of programs and policies that aim to increase QWL levels among professionals, as opposed to the mechanistic work perspective. Thus, this study aimed to measure the QWL of health professionals in prisons in the state of Paraíba and to verify factors associated with the QWL of these professionals.

Methods

This is an exploratory descriptive and analytical research with a quantitative and cross-sectional methodological approach carried out in prisons in the state of Paraíba. Inclusion criteria were selected for the selection of the research setting. The prison should include in its physical structure a health facility staffed with a team of professionals, according to the PNAISP and with less than 1,000 convicts: only six prisons followed these
criteria. Among the six prisons, one of them was selected for the pilot test and the remainder participated in the survey.

Research subjects were health professionals (physicians, nurses, nursing technicians, dentists, dental assistants, psychologists and social workers) who, at the time of data collection, had been working with convicts in prisons in the state of Paraíba selected for the study for at least six months. The population consisted of twenty-nine health professionals.

Field research aimed to collect data through the self-applicable tool called TQWL-42 (Total Quality of Life), which was developed in Brazil and validated for use among professionals. It was chosen because it specifically addressed the environment sphere, an important aspect for the QWL, especially when the setting is the prison system.

The first part of the tool includes questions about age, gender, marital status, schooling and length of service. The second part consisted of 42 questions, subdivided into six areas: A- Biological/Physiological, B-Psychological/Behavioral, C-Sociological/Relational, D-Economic/Political, E-Environmental/Organizational and F-Self-assessment of the quality of work life. The questions related to the aforementioned spheres are objective and their answers are arranged in a Likert scale. Research data were analyzed with statistical programs. Initially, data on the socioeconomic and demographic profile of the participants were tabulated. Subsequently, data collected through the TQWL-42 were grouped and analyzed descriptively, according to the syntax established by the author, through the calculations of spheres’ scores, for the measurement of QWL levels.

For the qualitative evaluation of QWL levels, the scale proposed by Timossi et al. in which the QWL levels are classified according to the calculation of the “Total” Quality of Life score (mean of all spheres) was used. The scale proposed by authors suggests that the central level (score 50) is the neutral level in relation to QWL, so the values included above correspond to the satisfactory and very satisfactory levels, and the values below reflect the unsatisfactory and very unsatisfactory levels.

Finally, to verify the statistical associations between QWL and the sociodemographic data and to identify which spheres influence the QWL of Prison Health Professionals (PHP), multiple linear regressions were performed using dummy variables for categorical variables. The first one verified the relationship between QWL (dependent variable) and sociodemographic data (independent variables). The second one verified the existence of a significant relationship between the self-assessment of QWL (dependent variable) and the spheres. ANOVA assumptions were verified through the Box-Cox optimal transformation family and the Hartley test was applied to verify the homogeneity of residual variances.

Before answering the tool, all research subjects were totally briefed about the project and later signed the Informed Consent Form (ICF). An identification system was established to ensure the anonymity of subjects. The research protocol was approved by the Research Ethics Committee of the State University of Paraíba.

Results

Table 1 shows the characterization of health professionals in the prison system. Most were female – 20 (69%), 8 were in the age group 35-44 years (27.6%) and 6 in the 45-54 years age group (20.7%), 17 reported being married or in common-law marriage (21.6%), 12 had completed a postgraduate level (41.4%) and 9 had been performing their duties in the prison system for more than 6 years (31.0%).

The psychological/behavioral sphere had the best evaluation among health professionals (77.37 points), while the environmental/organizational sphere obtained the lowest evaluation (63.05 points). The sphere that translated self-assessed Quality of Work Life had a mean of 71.99 points and the overall QWL score was 69.55 points (Table 1).

Subsequently, following the analyses, multiple linear regressions were performed. Histograms and the standardized residuals scatter plot evidenced that the distribution of variables followed assumptions of a normal distribution. Table 2 shows the estimated data-adjusted regression model parameters. The model was adapted taking into account the QWL dependent variable of health professionals of the prison system and independent variables: gender, age, length of service, schooling and marital status. Then, we observed that independent variables age, marital status and length of service were non-significant (p-value > 0.10) to represent QWL and variables gender and schooling were statistically significant (p-value < 0.10), as shown in Table 2.
Independent variables gender and schooling are nominal qualitative variables that corroborate with the use of the regression model with dummy variables. By specifying a regression equation with dummy variables, it is always possible to know the origin of the variability with t or F tests.

For the gender variable, we adopted reference level 0 - male. It can be observed (Table 2) that, on average, female individuals have a higher QWL when compared to males.

Regarding the schooling variable, adopting as a reference level the secondary school level, on average, individuals who have incomplete higher education and postgraduate degrees have a higher QWL compared to those who only attended secondary school.

Table 3 shows estimates of the data-adjusted regression model parameters, taking into account that the dependent variable was facet F (self-assessment of QWL) and the independent variables: A-Biological/Physiological sphere; B-Psychological/Behavioral sphere; C-Sociological/Relational sphere; D-Economic/Political sphere and E-Environmental/Organizational sphere.

It was observed that independent variables B-Psychological/Behavioral sphere; C-Sociological/Relational sphere and Economic/Political sphere were not significant (p-value > 0.05) to represent the QWL and A-Biological/Physiological and E-Environmental/Organizational variables were statistically significant (p-value<0.10), as shown in Table 3.

Discussion

The social and demographic situation interferes in the perceived QWL among workers. According to this study, female professionals had higher means of QWL in relation to male professionals, a result different from that proposed by Da Costa et al. The perception of lower QWL levels among women is due to the usual aspects of everyday women, such as double or triple consecutive working shifts. In relation to QWL and age, younger professionals showed the best means, which corroborates with the results obtained by Kujala et al., in a survey conducted in Northern Finland with several professional.
classes. Authors affirm that younger professionals perceive better future prospects and higher work capacity rates and, thus, are more satisfied in the work environment.

When considering QWL and schooling, the descriptive results of this research and the multiple linear regression showed that professionals with less years of schooling had lower levels of QWL. There is evidence that schooling does not interfere only with QWL, but in the overall quality of life of professionals, and low-schooling or illiterate individuals have lower mean values of QoL when compared to people with higher levels of education since these workers tend to face more complex situations in the workplace and daily life.

The mean score for self-assessment of QWL was similar to the overall assessment, both of which showed satisfaction among health professionals. It is noticed that good QWL levels are closely related to the pleasure perceived by professionals in their work, since it is understood that the great tendency among organizations is a modified work exercise, focused on duty/activity, toward practices that stir positive feelings among workers.

In addition, satisfaction with work is not only related to occupational factors, but also to personal aspects of the workers’ life. Thus, the minimalist view of work, professionals and QWL programs should give way to a new concept of worker satisfaction, in which all spheres are essential and focus is on QWL.

Among the most important spheres are the biological/physiological — consisting of aspects of physical and mental disposition, work skills, rest time and health services and social welfare — that showed, in multiple linear regression, statistical significance in relation to self-assessment of QWL and was evaluated by health professionals as satisfactory, with a trend toward very satisfactory.

This sphere is directly related to the absenteeism of professionals in the working environment, leaves or change of productive sector and can reduce the productivity and quality of services provided. In a survey carried out with nurses at Croatian medical centers in order to relate quality of life to job satisfaction, it was observed that the physical realm is highly associated with workers’ perception of their ability to perform their duties.

The ability to work and the physical and mental outlook can also be hampered by the shortage of rest hours. While a workload that is incapable of causing physical and mental health problems to professionals is not set, it is fundamental to comply with current legislation, since

Table 2. Estimated multiple linear regression model parameters and their respective standard deviations, t-test and the corresponding p-value for the dependent variable QWL of health professionals and independent variables (age and length of service), Paraíba, Brazil, 2015.

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>Estimated</th>
<th>Standard Deviation</th>
<th>t-test</th>
<th>p-value*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept (β0)</td>
<td>3.0726</td>
<td>0.3092</td>
<td>9.937</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>Female Gender (β1)</td>
<td>0.3374</td>
<td>0.1874</td>
<td>1.800</td>
<td>0.0844</td>
</tr>
<tr>
<td>Incomplete higher education (β2)</td>
<td>0.8125</td>
<td>0.3254</td>
<td>2.497</td>
<td>0.0198</td>
</tr>
<tr>
<td>Higher education complete (β3)</td>
<td>0.3367</td>
<td>0.2957</td>
<td>1.139</td>
<td>0.2660</td>
</tr>
<tr>
<td>Post-graduation complete (β4)</td>
<td>0.5658</td>
<td>0.2820</td>
<td>2.006</td>
<td>0.0562</td>
</tr>
</tbody>
</table>

* Significant at p < 0.10.

Table 3. Estimated multiple linear regression model parameters and their respective standard deviations, t-test and the corresponding p-value for the dependent variable self-assessment of QWL of health professionals and independent variables (spheres A and E), Paraíba, Brazil, 2015.

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>Estimated</th>
<th>Standard Deviation</th>
<th>t-test</th>
<th>p-value*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept (β0)</td>
<td>0.037</td>
<td>0.643</td>
<td>0.057</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>Sphere A – Bio (β1)</td>
<td>0.619</td>
<td>0.191</td>
<td>3.235</td>
<td>0.003</td>
</tr>
<tr>
<td>Sphere E – Env (β2)</td>
<td>0.391</td>
<td>0.148</td>
<td>2.633</td>
<td>0.014</td>
</tr>
</tbody>
</table>

* Significant at p < 0.10.
there is a reduced sleep time and increased level of fatigue and stress\textsuperscript{21}. The latter is capable of creating a unique situation in the workers’ life and can influence the other realms of the human being, such as the physical, psychological and social spheres\textsuperscript{21}.

In addition, with regard to the biological/physiological sphere, assured health care and social welfare to secure care is fundamental and this need is not always remedied by the public power. Field research carried out in the prison system of Minas Gerais reveals a lack of physical, mental and social health care for most workers, and this reality becomes even more worrying when one understands that this condition is associated with professionals’ illness\textsuperscript{24}.

Thus, it is imperative to provide comprehensive health care to these professionals, so that they can expose problems and needs felt in the workplace, in order to obtain support to overcome hurdles. In terms of mental health, illness is common among professionals in the prison system, due to an unhealthy workplace, with strong pressure, constant surveillance and violence, which are aspects that permeate the daily work life of professionals in the prison system\textsuperscript{25}.

The psychological/behavioral sphere was evaluated to a very satisfactory degree among health professionals. Self-esteem, task significance, feedback and personal and professional development were evaluated in this realm. Self-esteem of health professionals and the recognition of the task’s significance are important and sensitive aspects in the daily life of health professionals in the prison system. The number of criticisms and grievances that the Brazilian prison system has been subjected to over the years is increasing, mostly by families of convicts and by the communication and press system, regarding the application of inhuman penalties and inadequate treatment provided to inmates, which includes the lack of health care\textsuperscript{26}.

Thus, self-evaluation of professionals are of paramount importance to the work process, since the feeling of impotence, which can be generated from self-reflection about the relevance of their work in this setting, is capable of discouraging actions and cause negative feelings in the face of obstacles experienced by these health professionals who, in the prison system, cannot always ensure the right to health of the prison population.

It is important to emphasize that feedback from management also contributes to the work process and should be recognized by professionals as a strategy to regulate the care developed, while contributing to the orientation of practices and selection of those that had more efficient results, with the purpose of conferring value to professionals and their work process\textsuperscript{27}.

As with assessments and feedback, professional development is an important factor in developing better work processes. However, it still is an obstacle for health workers in the performance of care, especially in prisons, since the complaint about the lack of specific training to perform in this setting of great specificities is recurrent\textsuperscript{28}.

The intellectual capacity derived from the acquisition of new information and practices, as well as development of new skills and knowledge is converted into habit-changing opportunities, which can and should aim workers’ health, since it minimizes risk behaviors and empowers professionals to cope with daily work adversities, which improves the perception about their QWL and care provided\textsuperscript{24}. Greater investment by the State is required for the establishment of continuing education courses for health professionals of Brazilian EPENs.

The sociological/relational sphere, evaluated as satisfactory by the research participants consists of aspects of freedom of expression, autonomy, leisure time and interpersonal relationships. The way in which health professionals relate to one another and to others affects the care provided and workers’ health, since conflicting relationships in the work environment are an impediment to health care and contribute to the development of a burnout syndrome, which are understood as professionals’ inability to perform their duties\textsuperscript{29}.

Thus, interaction among professionals is essential for team and multidisciplinary work to ensure comprehensive care to people attended, due to the need for extensive intermeshing, oriented communication and mutual understanding between different health professionals\textsuperscript{30}, and is fundamental to ensure autonomy and freedom of expression.

Regarding these aspects, while evidenced with satisfactory rates among professionals, the lack of freedom and autonomy for the performance of care are pointed as obstacles to health actions in the prison system, since the Prison Security Officer (ASP) is constantly present during the service and, also, there is an appreciation for safety- and discipline-related aspects to the detriment of health care\textsuperscript{31}.

In addition, the lack of autonomy in the work environment becomes a deleterious aspect of QWL, since the devaluation of the personal skills
of the professionals, on the part of the organization affects feelings, such as the commitment with work, satisfaction for the accomplishment of labor activities and thus QWL and productivity. Therefore, in order to enable professionals to carry out their actions, in the context of an eminently repressive environment and where security/surveillance are priorities, EPEN must recognize prison’s work process specificities to ensure the health care of convicts.

Professionals working in prisons may have other jobs, such as a large number of SUS workers. Taking other jobs may be related to the level of neutrality with which professionals of this research evaluated the leisure time outside the work environment.

It has been recognized that professionals’ workload causes great interference in the management of their leisure activities and, consequently, those that add joy and sense of well-being to their daily lives. Perhaps the solution would be to improve the remuneration of these professionals, which in turn would discourage multiple jobs.

The economic/political sphere, consisting of aspects of job security, financial resources, extra benefits and working hours was evaluated at a satisfactory level among health professionals. A survey conducted in the prison sector in the state of Rio de Janeiro with the nursing category has shown that most of these professionals had entered the prison system due to the stability related to the public examination. Another aspect that contributes to the satisfaction of professionals in this sphere are working hours developed in prisons, only a daily shift, which must be of effective work by professionals and, to turn this into reality, changes in the work process are being undertaken in organizations in order to foster motivation and enthusiasm among workers.

Coupled with working hours, remuneration must be fair and adequate to the job performed. While professionals do not only aim for high wages, but enjoyment at work, unfair/inadequate remuneration is an important factor for workers’ lack of motivation and, therefore, low performance and negative influence on QWL. Whereas, satisfactory salaries and extra benefits positively affect professionals’ commitment to their work activity and the positive feelings related to work.

Now, it is fundamental to provide benefits to workers, for example, stimulating permanent education, since work types suffer new meanings in the perspective of recognizing the potential of professionals, seeking efficiency, through training, challenges that permeate activities in the work environment.

The sphere with the lowest degree of satisfaction among professionals was the environmental/organizational, consisting of work condition, variety and identity of the task and opportunity for growth. The multiple linear regression resulted in an association between the environmental/organizational sphere and the QWL, in which it ratifies that the physical environment of work and its organization interfere in the QWL of the professionals.

The opportunity for growth also is a fundamental line for professional motivation and this, in turn, has a great influence on the quality of life of people at work and contributes to motivation and enthusiasm during the work activity.

However, work conditions must be listed as a priority for management so that adequate work can be performed, since providing adequate resources for the development of activities is crucial, not only for work efficiency and for quality of the service provided, but also in order to sustain the QWL of professionals.

In a study carried out to describe the structural aspects and characteristics of work in basic health care in prisons in the state of Paraíba, it can be seen that the professionals’ offices were evaluated as inadequate by approximately half of the study participants, which shows the urgent need to foster discussions in search of efficient solutions to the obstacles found in the structure of the health facilities of the prison system.

It is also important to note that, in the prison sector, personal security is included in the working conditions. Thus, nursing professionals of the prison system of the state of Rio de Janeiro state that it is necessary to invest in more safety for health professionals who provide care to the health of convicts. The experience of a labor activity with overload and instability in the implementation over a long period can cause workers’ physical illness due to physiological excitation and generate diseases in the nervous and cardiovascular systems.

A survey that aimed to describe aspects of the work and level of satisfaction with the work of employees of two state prisons of Avaré (SP) showed that 56.8% of professionals who do not exercise repressive activity in the prison, including health professionals, were victims of verbal or physical abuse with reports of professionals who were held as hostages.
Care activity provided by professionals to convicts is based on Primary Care and, even in view of the great variety of activities carried out, the identification with the task performed is fundamental and this is also related to the satisfaction of workers vis-à-vis their job. Thus, satisfied professionals perform more efficient activities, while dissatisfaction contributes to higher levels of absenteeism, workplace accidents, lack of interest in professional development and decreased quality of care provided.

Final considerations

While stress-related dissatisfaction experienced by these professionals in the work environment was expected, the psychological/behavioral sphere obtained the highest level of satisfaction. The environmental/organizational sphere obtained the lowest mean satisfaction among health professionals and this result may be related to the national prison environment, which is scrapped. Contrary to that proposed in the literature, females had higher levels of QWL, to the detriment of male professionals. In relation to schooling, which reiterates the literature, professionals with lower levels of academic training have lower levels of QWL.

Limitations of this study were the small number of published works on the subject. The results of this study can contribute to the management of the prison system, considering the recognition of the items with the lowest levels of satisfaction, by providing a basis for the management to adapt them in order to ensure a better work infrastructure, better levels of professional autonomy and, thus, more efficient results in terms of the health of convicts.

Data from this Work evidence that professionals can become aware of their reality, since they adopt strategies during the work process that favor QWL. Finally, it is still a source of information for educational institutions, which should train future professionals by introducing them early in this setting for skills and competencies training.

Collaborations

ML Barbosa has contributed substantially to the design and planning, or analysis and interpretation of data; has contributed significantly to the drafting or critical review of content; and participated in the approval of the final version of the manuscript. TN Menezes has contributed significantly to the drafting or critical review of content; and participated in the approval of the final version of the manuscript. SR Santos, RA Olinda and GMC Costa has contributed substantially to the design and planning, or analysis and interpretation of data; and participated in the approval of the final version of the manuscript.
References


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