Care needs and workload required by institutionalised psychiatric patients¹

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Objectives: This descriptive study used a quantitative approach to assess the nursing care needs of patients with mental disorders, the mean number of care hours these patients were provided and the workload these patients require nursing team. Methods: The research was conducted in a public neuropsychiatric hospital located in south eastern Brazil in 2010 and included 105 patients as subjects. A patient classification tool was applied to characterise care profiles. Statistical analysis was performed using principal component analysis and analysis of variance. Results: Patients were predominantly in the low care category (73.3%). The mean care hours ranged from 0.57 to 0.88 for nurses and 1.97 to 3.16 for nursing assistants, and the workload ranged from 119.6 to 183 hours. Conclusions: The present study showed that the care needs of most patients were at a low level of dependency and that most patients did not need to be institutionalised. Furthermore, it was found that the care hours provided by the nursing staff were not sufficient to meet the care needs of the patients.

Descriptors: Mentally ill Persons/Classification; Psychiatric Nursing; Nursing Assessment.

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Introduction

In Brazil, five million people (3% of the population) suffer from severe and persistent mental disorders, and 23 million (12% of the population) need occasional or continuous mental health care⁽¹⁾. In light of this situation, the Ministry of Health, established guidelines and standards for the regulation of psychiatric hospital care through Ordinance 251/GM 2002⁽²⁾.

Patients with mental disorders typically do not present with clinical problems that require continuous nursing care, but they do require constant observation due to mood instabilities that can cause incidents of aggression toward themselves or their peers, escape attempts and suicide⁽³⁾.Identifying the needs of people with mental illness enables healthcare professionals to establish individualised intervention and treatment plans and makes the rehabilitation process more efficient⁽⁴⁾. Therefore, it is essential to understand the demand for patient care in terms of nursing to implement necessary changes to care management and the care process.

Theoretical Framework

The World Health Organisation (WHO)⁽⁵⁾ emphasises that people with chronic diseases, including those with mental disorders, require careful planning and attention that is capable of predicting their needs. The concept of need has been addressed in different ways by different authors. Needs are considered to be a set of physical and social requirements that must be met for an individual to experience wellbeing⁽⁶⁾; needs have also been described as states of conscious or unconscious tensions that result from hemodynamic imbalances of vital phenomena common to all human beings. The manifestations of need vary from one individual to another in terms of how they can be fulfilled. When a person cannot meet his own needs, the assistance of skilled people is required⁽⁷⁾.

For many years, the needs of patients with mental disorders were neglected due to lack of knowledge about mental illness and those afflicted with it, and stigma toward mental illness predominated⁽⁸⁾. Failure to identify the needs of patients with mental disorders precludes rehabilitative interventions, results in deficits in psychosocial functioning and leads to institutionalisation⁽⁹⁾.

Needs assessments have become part of routine clinical practice in mental health services. A Norwegian study⁽¹⁰⁾ compared patient's own perceptions of their

care needs with those of health professionals. Studies in England and Poland with patients with different mental disorders have shown that unmet needs are important and related to social aspects⁽¹¹⁾. Unmet needs are also strong indicators of less favourable perceptions of health and lower qualities of life. Different ecological environments may produce different needs⁽¹²⁾.

In Brazil, studies on the topic of care for patients with mental disorders have mostly focused on care in general hospitals, outpatient clinics and psychosocial care centres (e.g., Centro de Atenção Psicossocial - CAPS), which highlights the difficulties that nursing teams face regarding the perception of needs and specific care that should be provided to these patients⁽¹³⁾.

Working with people in mental distress requires nurses to provide care that respects the principles of citizenship and human rights, to participate in the development of individual treatment plans and to emphasise the patients and their potential⁽⁸⁾.

Tools exist to evaluate patients' care needs. The Patient Classification System (PCS) is a method that entails the identification of the individualised care required by patients and grouping of those patients into categories that enable the nursing team to identify the appropriate care profile and workload⁽¹⁴⁾. Workload can be defined as the activities performed in a given period by the team in the care process and the time required to perform these activities⁽¹⁵⁾. The measurement of workload makes it possible to determine the most appropriate number of members required by a nursing team to provide quality care and meet the patients' needs.

The use of the PCS as to determine the patients" profiles and allocate nursing staff was recommended by Resolution 293/2004 of the Federal Board of Nursing (Conselho Federal de Enfermagem - COFEN)⁽¹⁶⁾. A to facilitate application of the PCS to patients with mental disorders is available in the literature⁽³⁾ Evidence of the lack of use of classification tools in mental health care has been found in earlier studies⁽¹⁷⁾. It is noteworthy that there is only one study that appliesa classification tool in a psychiatric inpatient unit in a general hospital⁽¹⁸⁾.

Given the lack of national scientific publications evaluating the care needs of patients with mental disorders, the present study aimed to accomplish the following: 1.assess the nursing care needs of patients with mental disorders, 2. determine the care areas that contribute most strongly to the classification of patients into different care categories, and 3. identify the mean care hours and workloads of the nursing team.

Methods

Design

The present study is descriptive with a quantitative approach. It was carried out between August and September 2010 in a public neuropsychiatric hospital with 340 beds located in the southeastern region of Brazil. Only patients with mental disorders hospitalised in the Comprehensive Health Care Centre (Gerências de Atenção Integral à Saúde – GAIS) IV and Protected Houses Centre (Núcleo de Moradias Protegidas - NMP) were included. A total of 105 patients, divided into three inpatient units, were included.

The GAIS IV has 70 beds (units F1 and F3),and its purpose is to care for inpatients with severe and persistent mental disorders and a history of several years of hospitalisation. The NMP comprises the C3 unit (40 beds) and eight apartments intended for patients with lesser degrees of dependency.

The nursing teams allocated to these units comprised the following: two nurses and 28 nursing assistants for unit F1, two nurses and 21 nursing assistants for unit F3and two nurses and 26 nursing assistants for unit C3. During the night shift, the two nurses were assigned to more than one unit.

Tools

A socio-demographic (gender, age) and clinical (hospital stay and clinical diagnosis) data form was developed. Data were extracted from the hospital administration system.

To characterise patient care profiles, a classification tool validated for psychiatric purposes was applied⁽³⁾; this classification tool covered the following 11 areas of care: 1. care regarding appearance and hygiene; 2. expression of thought; 3. mood and affection; 4. activities; 5. social interaction; 6. nutrition and hydration; 7. sleep; 8. medication; 9. eliminations; 10. vital signs and other controls; and 11. problems and somatic complaints. Each area was rated from 1 to 3 with higher scores indicating increased necessary care complexity. The minimum score was11 and the maximum 33 points. This score was used to classify each patient into one of three categories of care: Low (11-18 points), Intermediate (19-26 points) and Comprehensive (27-33 points).

Data Collection Procedure

The patients admitted to the studied units were classified daily (Monday to Friday) for six consecutive

weeks until a total of 30 classifications were performed for each patient by the nurses (six in total) assigned to the units. The nurses were given instructions about the classification tool and its use.

Data regarding the nursing staff were collected at the Personnel Centre (records of unplanned absences), and personnel schedule spreadsheets were provided by the board of nursing (planned absences).

Non-working hours such as vacations, paid weekly rests, services provided in other units, hours off, sick leave, suspensions, absenteeism and other non-working hours were not included in the calculations detailed in the following equations⁽¹⁹⁾:

 1 - Nursing Hours = number of hours worked by a nurse/ number of patient-days in a period;

2 - Nursing Assistant Hours = number of hours worked by assistant/number of patient-days in the period;

3 - Nursing/bed ratio - number of nursing professionals/ mean patient-days;

4 - Nurse/bed ratio - number of nurses/mean patientdays;

5 - Nursing assistant/bed ratio- number of nursing assistants/mean patient-days.

6 - Workload = product of the mean daily number of patients treated according to the degree of dependence on the nursing team x mean care time⁽²⁰⁾. The mean care hours by care category recommended by Resolution 293/2004 of COFEN⁽¹⁶⁾ were used. Thus, values of 3.8 hours for low care, 5.6 hours for intermediate care and 9.4 hours for comprehensive care were used. These values were selected due to the absence of predetermined mean hours of nursing care specific for patients with mental disorders in Brazil.

Data collection was conducted only after formal authorisation from the hospital, free and informed consent of the nurses and approval by the Research Ethics Committee (Assent No. 319/2010).

Presentation and treatment of data

Statistical analyses were performed with principal component analysis (PCA) for examination of the covariance matrix and analysis of variance (ANOVA) for comparison of means when data were normally distributed. When data were not normally distributed, the *Kruskal-Wallis* test was used for paired comparisons of medians with Bonferroni correction. Descriptive data are expressed as percentages, means, standard deviations and ranges. Statistical analyses were performed using the R.2.11.1 program (*Copyright The R Foundation for Statistical Computing*).

Results

61 (58.1%) and the most common length of stay was between 6 to 15 years - 59 (56.2%). The mean hospital stay was 10.9 years (SD = 7.3) and ranged from 1 to 29 years (Table 1).

Of the patients studied, the majority (60) were male (57.1%), in the range of 41 to 60 years of age -

Table 1 - Demographic data and lengths of stay of patients according to inpatient unit (N = 105). Lins, SP (São Paulo), Brazil, 2010

| Variables n (%) | F1 (n = 40) | F3 (n = 26) | C3 (n = 39) | Total (N = 105) |
|-----------------------------------|-------------|-------------|-------------|-----------------|
| | n (%) | n (%) | N (%) | |
| Gender | | | | |
| Female | 11(27.5) | 18 (69.0) | 16 (41.0) | 45 (42.9) |
| Male | 29(72.5) | 8 (31.0) | 23 (59.0) | 60 (57.1) |
| Age (years) | | | | |
| ≤20 | - | 1 (3.9) | - | 1 (0.9) |
| 21-40 | 3(7.5) | 9 (34.6) | 3 (7.7) | 15 (14.3) |
| 41-60 | 27(67.5) | 13 (50.0) | 21 (53.8) | 61 (58.1) |
| 61-80 | 10(25.0) | 3 (11.5) | 15 (38.5) | 28 (26.7) |
| M (SD) | 53.8 (10.3) | 44.2 (13.1) | 56.7 (10.7) | 52.5 (11.4) |
| Range | 31-78 | 18-64 | 25-80 | 18-80 |
| Length of hospitalisation (years) | | | | |
| ≤ 5 | 7 (17.5) | 9 (34.6) | 9(23.0) | 25 (23.8) |
| 6 – 10 | 16 (40.0) | 6 (23.0) | 10(25.6) | 32 (30.5) |
| 11– 15 | 10 (25.0) | 7 (27.0) | 10(25.6) | 27 (25.7) |
| 16 – 20 | 3 (7.5) | 2 (7.7) | 4(10.2) | 9 (8.6) |
| 21 – 25 | 3 (7.5) | - | 1(2.6) | 4 (3.8) |
| 26 – 29 | 1 (2.5) | 2 (7.7) | 5(13.0) | 8 (7.6) |
| M (SD) | 10.7 (6.2) | 9.8 (6.0) | 12(8.2) | 10.9(7.3) |
| Range | Jan/27 | Jan/29 | Jan/28 | Jan/29 |

Schizophrenia (n=50, 47.7%) and mental retardation (n=41, 39%) were the most prominent diagnoses. Schizophrenia was most commonly diagnosed in units F1 (n=20, 50%) and C3 (n=21, 53.8%), and mental retardation was most commonly diagnosed in unit F1 (n=15, 37.5%). The greatest

number of patients were classified as having a low level of dependence (n = 77, 73.3%), and the highest concentration of low-dependence patients was found in unit C3 (n=35, 89.7%). Patients with comprehensive dependence levels were found only in unit F1 (n= 2; 5%) (Table 2).

Table 2 - Characterisation of clinical care diagnoses and classification of dependency levels according to inpatient unit. Lins, SP, Brazil, 2010

| M 2.11. | F1 (n=40) | F3 (n=26) | C3 (n=39) | T (N=105) | |
|---------------------|-----------|-----------|-----------|-----------|--|
| variables | n (%) | n (%) | n (%) | N (%) | |
| Schizophrenia | 20 (50.0) | 9 (34.6) | 21 (53.8) | 50 (47.7) | |
| Mental Retardation | 15 (37.5) | 13 (50.0) | 13 (33.3) | 41 (39.0) | |
| Epilepsy | 3 (7.5) | 2 (7.7) | 3 (7.7) | 8 (7.6) | |
| Mental Disorder | 2 (5.0) | 2 (7.7) | 2 (5.2) | 6 (5.7) | |
| _evel of dependency | | | | | |
| Low | 27 (67.5) | 15 (57.7) | 35 (89.7) | 77 (73.3) | |
| Intermediate | 11 (27.5) | 11 (42.3) | 4 (10.3) | 26 (24.8) | |
| Comprehensive | 2 (5.0) | - | - | 2 (1.9) | |

Table 3 shows the distributions of patients with schizophrenia and mental retardation according to demographic variables (gender and age) and length of hospitalisation, separated by the most frequently observed diagnoses in the study population. Both patients with schizophrenia and patients with mental retardation were slightly more likely to be male (n=27(54%)) and n=22(53.7%), respectively). The mean age of schizophrenia patients was 57.9(10.9) years, and the mean age of mental retardation patients

was 52.8(13.7) years. The mean length of stay for patients with schizophrenia was 10.3 (6.0) years, it was 11.9 (7.9) years for patients with mental retardation, and there was no significant difference between genders.

Table 3 - Distribution of patients with schizophrenia and mental retardation according to age and length of hospitalisation. Lins, SP, Brazil, 2010

| Variables | Schizophrenia (N=50) | | | Mental Retardation (N=41) | | |
|-----------------------------------|----------------------|------------|------------|---------------------------|------------|------------|
| | M n(%) | F n (%) | T N (%) | M n(%) | F n (%) | T N (%) |
| | 27(54) | 23(46) | 50 (100) | 22(53.6) | 19(46.3) | 41(100) |
| Age (years) | | | | | | |
| 21 – 40 | 1(3.7) | 1(4.3) | 2(4.0) | 4(9.7) | 3(15.8) | 7(17.1) |
| 41 – 60 | 17(63.0) | 14(60.9) | 31(62.0) | 14(34.1) | 7(36.8) | 21(51.2) |
| 61 – 80 | 9(33.3) | 8(34.8) | 17(34.0) | 4(9.7) | 9(47.4) | 13(31.7) |
| M (SD) | 56.4(10.6) | 59.7(11.4) | 57.9(10.9) | 50.5(12.1) | 56.8(14.6) | 52.8(13.7) |
| Range | 36-72 | 36-72 | 25-74 | 28-67 | 34-78 | 28-78 |
| Length of hospitalisation (years) | | | | | | |
| ≤ 5 | 7(25.9) | 6(26.1) | 13(26.0) | 4(17.3) | 5(27.8) | 9(21.9) |
| 6 – 10 | 8(29.7) | 5(21.7) | 13(26.0) | 10(43.7) | 3(16.7) | 13(31.8) |
| 11 – 15 | 8(29.6) | 8(34.9) | 16(32.0) | 4(17.3) | 5(27.8) | 9(21.9) |
| 16 – 20 | 3(11.1) | 2(8.7) | 5(10.0) | 2(8.7) | 1(5.5) | 3(7.3) |
| 21 – 25 | 1(3.7) | 1(4.3) | 2(4.0) | - | 2(11.1) | 2(4.9) |
| 26 – 29 | - | 1(4.3) | 1(2.0) | 3(13.0) | 2(11.1) | 5(12.2) |
| M (SD) | 9.9(5.5) | 10.8(6.6) | 10.3(6.0) | 11.5(7.6) | 12.4(8.3) | 11.9(7.9) |
| Range | 1-22 | 1-27 | 1-27 | 5-28 | 1-29 | 1-29 |

Table 4 presents the principal component analysis for factors 1 and 2, shows the amount of variation explained by each factor and illustrates how strongly each variable contributed to the factorial composition with the factorial weights. Analysis of the 11 indicators revealed that the first two factors accounted for 60.3% of the total variation in the data. The first factor, which explains the intensity of care alone, accounted for 46.3% of the total variability and is therefore the most important; i.e., it is the factor that had the most discriminatory power.

Analysis of factorial weights showed that the most significant care areas in factor 1 were as follows: social interaction (0.51), expression of thought (0.42), activities (0.38), care regarding appearance and hygiene (0.37), eliminations (0.35) and mood and affection (0.34). The critical indicators social interaction (51%) and expression of thought (42%) had the greatest factorial weights, and the vital signs and other control indicator sexhibited the lowest weight (0.01).

Factor 2 explained the contrast between biological and social care needs and represented 14% of the total variability. Factor 2 combined the following areas of care: food/hydration (0.57), eliminations (0.53), care regarding appearance and hygiene (0.29) and vital signs and other controls (0.25), in contrast with the areas of expression of thought (-0.28), activities (-0.28), social interaction (-0.22) and mood and affection (-0.20). The care areas of food/hydration (0.57), eliminations (0.53), expression of thought and activities (-0.28 each) were the areas that contributed the most to the perception of this internal divergence within the groups.

Table 4 - Principal component analysis of factors 1 and 2. Lins, SP, Brazil, 2010

| Covariance Matrix | | | | |
|-------------------|----------|----------|--|--|
| Eigen value | 1.136 | 0.344 | | |
| Proportion | 0.463 | 0.14 | | |
| Cumulative | 0.463 | 0.603 | | |
| Variable | Factor 1 | Factor 2 | | |
| CA1 | 0.37 | 0.29 | | |
| CA2 | 0.42 | -0.28 | | |
| CA3 | 0.34 | -0.2 | | |
| CA4 | 0.38 | -0.28 | | |
| CA5 | 0.51 | -0.22 | | |
| CA6 | 0.2 | 0.57 | | |
| CA7 | 0.07 | 0.03 | | |
| CA8 | 0.03 | 0.04 | | |

(continue...)

Table 4 - (continuation)

| Variable | Factor 1 | Factor 2 |
|----------|----------|----------|
| CA9 | 0.35 | 0.53 |
| CA10 | -0.01 | 0.25 |
| CA11 | 0.01 | 0.03 |
| | | |

CA1 = care regarding appearance and hygiene; CA2 = expression of thought; CA3 = mood and affection; CA4 = activities; CA5 = social Interaction; CA6 = food and Hydration; CA7 = sleep; CA8 = medication, CA9 = eliminations; CA10 = vital signs and other controls; CA11 = complaints and somatic Problems.

The mean workload in the three studied units ranged from 119.6(SD = 6.0) to 183 (SD = 8.5) hours, and the mean care hours provided to patients ranged from 0.57 to 0.88 for nurses and 1.97 to 3.16 for nursing assistants. The number of professionals/bed in the units ranged from 0.27 to 0.42, nurses/bed varied from 0.07 to 0.11 and nursing assistants/bed ranged from 0.20 to 0.31 (Table 5).

Table 5 - Workload of the nursing team, nurse/bed ratios and nursing assistant/bed ratios according to inpatient unit. Lins, SP, Brazil, 2010

| Variables | F1(n=40) | F3(n=26) | C3(n=39) |
|-----------------------|----------|------------|------------|
| Workload (hours) | | | |
| M(SD) | 183(8.5) | 119.6(6.0) | 157.5(2.6) |
| Per patient | 4.57 | 4.60 | 4.00 |
| Range | 170-208 | 107-127 | 150-160 |
| Nurses | | | |
| Total workload | 690 | 690 | 690 |
| Nº patients-day | 1.200 | 780 | 1.170 |
| Nursing hours | 0.57 | 0.88 | 0.59 |
| Nursing assistants | | | |
| Total workload | 2.620 | 2.471 | 2.313 |
| Nº patients-day | 1.200 | 780 | 1.170 |
| Nursing assist. hours | 2.18 | 3.16 | 1.97 |
| Ratio | | | |
| Nursing/bed | 0.27 | 0.42 | 0.28 |
| Nurse/bed | 0.07 | 0.11 | 0.08 |
| Nursing assistant/bed | 0.20 | 0.31 | 0.20 |

Discussion

Schizophrenia was the predominant diagnosis (n=50, 47.7%), and this finding was similar to those of other studies $(43.3\%)^{(21)}$. Schizophrenia was followed by mental retardation (n=41, 39%). The long length of hospitalisation found (10.9 years) may be related to factors such as the socio-demographic profiles of the institutionalised population (this is the subject of another study), which showed that a significant number of patients were elderly (n=28, 26.7%), illiterate (n=60; 57.1%), single (n=94; 89.5%) and had no source of income (n=71; 67.7%). This finding may also have been due

to difficulties in social interaction resulting from injuries, discrimination and social exclusion. The existence of long-stay institutions is not in keeping with the proposals for deinstitutionalisation set out in the Psychiatric Reform, which promotes the creation of various devices, such as outpatient clinics, CAPS, therapeutic residences and inpatient units in general hospitals.

Regarding care needs, most patients were at the low dependence level - (73.3%). Other studies using the same tool in this same category have found a dependence level of58%⁽³⁾in a psychiatric institution and 62% in the inpatient psychiatric unit of a general hospital⁽¹⁸⁾.

Social interaction (0.51) and expression of thought (0.42) had the highest factorial weights; i.e., they were the most important care areas for capturing changes in healthcare categories. The quality of social interaction is one of the most important factors in recovery from and prevention of mental health problems⁽²²⁾. Within the classification tool, this care area addresses the patient's behaviour in social and interpersonal relationships and evaluates their cooperativeness and interest in occupying themselves as well as possible hostility, tolerance and neglect of their responsibilities⁽³⁾. Research carried out in Scotland⁽²³⁾ with elderly people with mental disorders revealed that social needs are the most frequent needs.

The present study questioned whether nursing care needs differed between patients with schizophrenia and those with mental retardation, but no difference was evident (p < 0.18). The patients were divided into three distinct units (F1, F3 and C3) according to medical diagnoses and the clinical assessments of the nurses.

Evaluation of workload and the adequacy of nursing human resources leads to safe and high-quality care. Indicators have been used to measure and evaluate the effects of the care provided such ashuman resources management referred by the Commitment to Hospital Quality (Compromisso com a Qualidade Hospitalar - CQH), which enables the hours of nursing care per professional and care category to be evaluated⁽²⁴⁾.

The composition of the nursing teams assigned to the inpatient units was 9.6% nurses and 90.4% nursing assistants. The mean workload ranged from 119.6 to 183hours. Comparisons of these numbers with previous research are not possible due to the lack of Brazilian studies addressing this issue. For the care hours per professional category, values ranged from 0.57 to 0.88hours for nurses and 1.97 to 3.16 hours for nursing assistants and totalled 2.56 to 4.04 hours of care per patient per 24 hours. Regarding inpatient units, the number of professionals/bed varied between 0.27 and 0.42. The number of patients who can be therapeutically attended to by a nursing team is still not well defined in the literature⁽³⁾. Data presented in 2009 by the CQH covering four psychiatric hospitals revealed a median of 0.12 nurses/bed (range 0.08 to 0.37)⁽²⁴⁾. Resolution 864/2002 of the Municipal Health Department (Secretaria Municipal da Saúde - SMS) of Rio de Janeiro instituted 5.5 hours of nursing care per patient/day as a parameter for establishing human resource allocation in psychiatric clinics⁽²⁵⁾.

Patients with greater clinical care needs were allocated to unit F1, which emphasises psychiatric rehabilitation with a focus on psychosocial rehabilitation and improving the quality of life. After classification, unit F1 was revealed to be the only unit to which comprehensively dependent patients were allocated (5%). Unit F1 had lower ratios of nursing professional/ bed (0.27), nurses/bed (0.07) and fewer nursing care hours provided by nurses (0.57). The workload according to the care profile per patient is 4.57hours, which, when compared with the actual value of 2.75hours, showed a shortfall of 1.82hours. Considering that unit F1 was the only unit to provide patient care in the comprehensive category (5%), the nursing care hours provided were below the levels recommended by the COFEN/2004 Resolution⁽¹⁶⁾ (9.4 nursing hours per patient in comprehensive care) and the SMS/2002 Resolution⁽²⁵⁾ (5.5 hours of care per patient/day).

Patients in unit F3 required more intensive psychiatric care because of the frequent occurrence of psychotic episodes. In this unit, 42.3% of patients were classified as intermediately dependent, and the ratio of 0.11 nurses/bed was similar to the CQH median (0.12). The workload according to the care profile is 4.6 hours/ patient, which was similar to the value actually achieved (4.04 hours). The actual value, however, did not reach the values recommended by COFEN (5.6hours) and the SMS Resolution (5.5hours).

Unit C3 included patients with lesser degrees of dependency on nursing; i.e., low dependence (90%). Due to the characteristics of these patients, self-care is emphasised. The mean care times were 0.59hoursfor nurses and 1.97hours for nursing assistants, which totalled 2.56hours of care from the nursing team. The nurse/bed ratio (0.28) was similar to that found in unit F1.

Results regarding the ratio of nursing professionals/ bed revealed the different realities in different services. Inadequate numbers may compromise the quality of nursing care provided and the nurses' work. A study conducted in a psychiatric hospital found that professionals with day-to-day experience rudimentarily use the severity of the patient's needs as a criterion for assigning staff⁽¹⁷⁾. Consequently, failure to perform patient classification prior to determination of the appropriate size of the team meant that they could not substantiate their argument to expand the workforce.

Limitations of the Study

These findings are from a long-stay institution and may not be representative of other hospitals treating patients with mental disorders. Because no nursing care hours have been pre-determined specifically for psychiatric patients, the values recommended by COFEN for measuring workload were used. The value obtained may therefore not accurately represent the workload required by psychiatric patients but may be used a reference.

Implications for Nursing Practice

The identification of care profiles using valid and reliable tools enables care planning that is based on the real care needs of patients and measurements of the required and actual performed workloads of the nursing team. The information provides tools to managers for decision-making and management actions aimed at coordinating the care process and making quantitative and qualitative personnel adjustments.

Conclusion

The present study showed that most patients required a low-dependence level of care. According to the Psychiatric Reform, these patients do not need to be institutionalised and could be treated as outpatients. Furthermore, it was found that the care hours provided by the nursing team were insufficient to meet the care needs of the patients.

It is hoped that the present study can contribute to the search for ways to provide improved nursing care for patients with psychiatric disorders and support the allocation of staff in this specialisation. Further research is needed to enable comparisons with the findings of the present study.

References

 Ministério da Saúde (BR). Informativo Eletrônico da SE/CNS para conselheiros nacionais [Internet]
V.6, Brasília: Ministério da Saúde. [acesso 5 fev 2012]. Disponível em http://bvsms.saude.gov.br/bvs/ periodicos/carta_eletronica_29092010.pdf

 Ministério da Saúde (BR). Secretaria da Atenção à Saúde/ DAPE. Coordenação Geral de Saúde. Saúde Mental no SUS: acesso ao tratamento e mudança do modelo de atenção. Relatório da gestão 2003-2006. Brasília: Ministério da Saúde; 2007. 85 p.

3. Martins PASF, Arantes EC, Forcella HT. Sistema de Classificação de Pacientes na especialidade enfermagem psiquiátrica: validação clínica. Rev Esc Enferm USP. 2008;42(2):233-41.

4. Ekdawi MY, Conning AM. Psychiatric rehabilitation: a practical guide. London: Chapman & Hall; 1994.

5. Organização Mundial da Saúde. Cuidados inovadores para condições crônicas: componentes estruturais de ação. Relatório mundial. Brasília (DF): OMS; 2003.

6. Steverink N, Lindenberg S. Which social needs are important for subjective well-being? What happens to them with aging? Psychol Aging. 2006;21(2):281-90.

7. Horta WA. Processo de enfermagem. São Paulo: EPU; 1979.

8. Souza MGG, Cruz EMTN, Stefanelli MC. Educação continuada e enfermeiros de um hospital psiquiátrico. Rev Enferm UERJ. 2007;15(2):190-6.

9. Bartels SJ, Mueser KT. Psychosocial rehabilitation for older adults with serious mental illness: Introduction to special series. Am J Psychiatr Rehabil. 2008;11:1-6.

10. Hansen T, Hatling T, Lidal E, Ruud T. Discrepancies between patients and professionals in the assessment of patient needs: a quantitative study of Norwegian mental health care. J Adv Nurs. 2002;39(6):554562.

11. Dobrz'nska E, Rymaszewska J, Kiejna A. Needs of persons with mental disorders: definitions and literature review. Psychiatr Pol. 2008;42(4):515-24.

12. Ribeiro SMA. Necessidades e saúde mental: comparação das necessidades de idosas que vivem numa instituição de saúde mental, num lar de terceira idade e na comunidade [tese]. Lisboa (PT): Faculdade de Psicologia da Universidade de Lisboa; 2010.

13. Paes MR, Maftum MA, Mantovani MF. Cuidado de enfermagem ao paciente com comorbidade clínicopsiquiátrica em um pronto atendimento hospitalar. Rev Gaúcha Enferm. 2010;31(2):277-84.

14. Perroca MG. Desenvolvimento e validação de conteúdo da nova versão de um instrumento para classificação de pacientes. Rev. Latino-Am. Enfermagem. 2011;19(1):58-66.

15. O'Brien-Pallas L; Irvine D; Peereboom E; Murray M. Measuring nursing workload: Understanding the variability. Nurs Econ. 1997;15(4):171-82.

16. Conselho Federal de Enfermagem (BR). Resolução n.293/2004. Fixa e estabelece parâmetros para o dimensionamento do quadro de profissionais de Enfermagem nas unidades assistenciais das instituições de saúde e assemelhados. [legislação na internet]. São Paulo: COREN-SP; 2004. [acesso 18 dez 2011] Disponível em: http: //www.corensp.org.br/resoluções/ resolucao293.htm.

17. Carvalho MB, Felli VEA. O trabalho de enfermagem psiquiátrica e os problemas de saúde dos trabalhadores. Rev. Latino-Am. Enfermagem. 2005;14(1):61-9.

18. Oliveira RP, Laus AM. Caracterização de pacientes de unidade de internação psiquiátrica, segundo grau de dependência do cuidado de enfermagem. Rev Esc Enferm USP. 2011;45(5):1164-70.

 Associação Paulista de Medicina (BR). Manual de indicadores de enfermagem NAGEH. Programa de Qualidade Hospitalar – CQH (Compromisso com a Qualidade Hospitalar). São Paulo: APM/CREMESP; 2006.
Gaidzinski RR, Fugulin FMT, Castilho V. Dimensionamento de pessoal de enfermagem em instituições de saúde. In: Kurcgant P. Gerenciamento em enfermagem. Rio de Janeiro: Guanabara Koogan; 2010.

21. Barros NHS. Características biossociodemográficas e diagnósticos de pacientes internados em hospital psiquiátrico de Campo Grande-MS [dissertação]. Campo Grande (MS). Curso de Psicologia da Universidade Católica Dom Bosco; 2007.

22. Carmona CGH, Melo NA. Comunicacion interpersonal: programa de entrenamiento em habilidades sociales. Santiago: Ediciones Universidad Católica de Chile; 2000. 23. McNulty SV, Duncan L, Semple M, Jackson GA, Pelosi AJ. Care needs of elderly people with schizophrenia: assessment of an epidemiologically defined cohort in Scotland. Br J Psychiatry. 2003;182:241-2.

24. Programa de Qualidade Hospitalar (CQH). Compromisso com a qualidade hospitalar. Indicadores 2009 4º trimestre. Hospitais Psiquiátricos [texto na Internet]. [acesso 3 fev 2012]. Disponível em: http:// www.cqh.org.br/?q=node/322.

25. Secretaria Municipal da Saúde (RJ-BR). Resolução de SMS n.864 de 12 de abril de 2002. Considerações acerca do perfil da unidade e do modelo assistencial/parâmetro de dimensionamento de recursos humanos no âmbito da Secretaria Municipal de Saúde. Diário oficial do município do Rio de Janeiro, 2002 abr 15. p. 23.