

## Academic and professional education of physiotherapists working in a public hospital

### Formação acadêmica e profissional de fisioterapeutas atuantes em um hospital público

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**ABSTRACT | INTRODUCTION:** The presence of the physiotherapist in the hospital scope became essential, but it is important that these professionals continue to seek specific knowledge, making professional specialization one of the key points for quality service. **OBJECTIVE:** The purpose of this study was to describe a sociodemographic, academic and professional profile of physiotherapists enrolled in a public hospital in the city of Salvador, Bahia. **MATERIALS AND METHODS:** This is a cross-sectional and descriptive study, whose target population was the physiotherapists from a public hospital in the city of Salvador-BA, using a convenience sample. The data were collected using a specific questionnaire, elaborated by the authors, containing sociodemographic, academic and professional questions. **RESULTS:** 41 physiotherapists were interviewed and considered eligible to participate in the study, 51.3% (n = 21) working at wards, 36.5% (n = 15) in the outpatient clinic and 12.2% in the ICU. Most of the participants are female, represented by 56%, and mostly aged between 31 and 40 years old. In this study, 87.8% of the participants stated that they had some specialization in several areas of practice. **CONCLUSION:** Based on the results of this study, it can be concluded that the study is composed of a sample mostly of the female gender, in the age group of 31-40 years, graduated in a private institution for an average of six to ten years and with at least a specialization in progress and/or completed.

**KEYWORDS:** Physical therapy department, Hospital. Health services research. Education continuing. Education, graduate.

**RESUMO | INTRODUÇÃO:** A presença do fisioterapeuta no âmbito hospitalar se tornou imprescindível, porém é importante que esses profissionais continuem a buscar conhecimentos específicos na formação, tornando a especialização profissional um dos pontos chave para um atendimento de qualidade. **OBJETIVO:** Traçar um perfil sociodemográfico e de formação acadêmica e profissional dos fisioterapeutas inseridos em um hospital público na cidade de Salvador, Bahia. **MATERIAIS E MÉTODOS:** Trata-se de um estudo transversal e descritivo, que teve como população alvo os fisioterapeutas de um hospital público na cidade de Salvador- BA, sendo utilizada uma amostra de conveniência. Os dados foram coletados a partir de um questionário específico, elaborado pelas autoras, contendo questões sociodemográficas e de formação acadêmica e profissional. **RESULTADOS:** Foram entrevistados e considerados elegíveis a participar do estudo 41 fisioterapeutas, sendo que 51,3% (n= 21) atuam na enfermagem, 36,5% (n=15) no ambulatório e 12,2% (n=5) na UTI. A maior parte dos participantes é do sexo feminino (56%), e em sua maioria com idade entre 31 e 40 anos de idade. Nesse estudo, 87,8% dos participantes afirmaram possuir alguma especialização, em diversas áreas de atuação. **CONCLUSÃO:** Baseado nos resultados desse estudo pode-se concluir que o estudo é composto por uma amostra prioritariamente do gênero feminino, na faixa etária de 31-40 anos, formado em instituição privada há uma média de tempo entre seis a dez anos e com ao menos uma especialização em andamento e/ou concluída.

**PALAVRAS-CHAVE:** Serviço hospitalar de fisioterapia. Pesquisa sobre serviços de saúde. Educação de pós-graduação.

## Introduction

Physiotherapeutic assistance in the hospital environment has been shown to be very important in decreasing the length of hospitalization time of patients and in the prognosis after hospital discharge, where they have a higher rate of functional recovery. The constant presence of the physiotherapist in the hospital environment is essential, but it is also important that these professionals have specific knowledge to work in the environment, what makes professional specialization one of the key points for quality care<sup>1</sup>.

The graduation in healthcare was designated as one of the attributions of the Brazilian Unified Health System (SUS), being managed by public health institutions. However, the large number of private institutions that fulfill this function is significant. The number of higher education institutions offering the course of physiotherapy in the years 1995-2015 increased by 888%, which in 1995 were 63 institutions, 17 public and 46 private institutions. In 2015, that number had grown to 560 institutions, but the number of public universities has not kept quantitative growth of private institutions, showing a large discrepancy with 492 private institutions and only 68 public institutions<sup>2</sup>.

In 2016, the physiotherapy course, nationwide, occupied the 13th place in the undergraduate course with the highest number of entries, with 55,973 new students, 76.9% male and 23.1% female<sup>3</sup>. A study in the state of New South Wales, Australia, developed a profile of physiotherapy between the years 1975 and 2002, showing that in 1975 the percentage of female professionals was 94.8%, occupying almost the entire professional field, but in 2000 this number dropped to 76.5%, with an increasing number of male physiotherapists. It was observed by the researchers that despite being a minority, male professionals are ahead in relation to post graduate degree, considering that in 1998, 34% of male physiotherapists were post graduated against 23.2% of women<sup>4</sup>.

In order to begin the exploration about the professional profile working in the public network, this study aimed to describe sociodemographic, academic education and professional qualification of physiotherapists inserted in a public hospital by the Brazilian Unified Health System (SUS) in the city of Salvador, Bahia, Brazil.

## Materials and methods

A quantitative descriptive cross-sectional study, using a convenience sample that had as target population all physiotherapists working in a public hospital in the city of Salvador-BA. The chosen hospital offered the service of physiotherapy in wards, Intensive Care Unit (ICU), and ambulatory service. The project was submitted for evaluation and approval by the Research Ethics Committee of the chosen institute, being approved under protocol number 2.657.824 (CAAE 85221418.1.0000.0047), in compliance with National Health Council Resolution 466/12.

The target population had a possible n of 68 professionals. As inclusion criteria, physiotherapists should be registered at the Regional Council of Physiotherapy and Occupational Therapy and should work at the hospital for at least six months. The exclusion criteria would be questionnaires incompletely answered by professionals.

Each physiotherapist participant received an Informed Consent Form, containing information about the research, agreeing to voluntarily participate in the study and share the findings, being free to leave the study at any time.

A specific questionnaire was used for data collection, elaborated by the authors, containing sociodemographic questions (gender and age), and questions about academic and professional education (type of high education institution; time of graduated; post-graduation courses; institution where was made the post-graduation and area of specialization) and for how long have been working at the hospital.

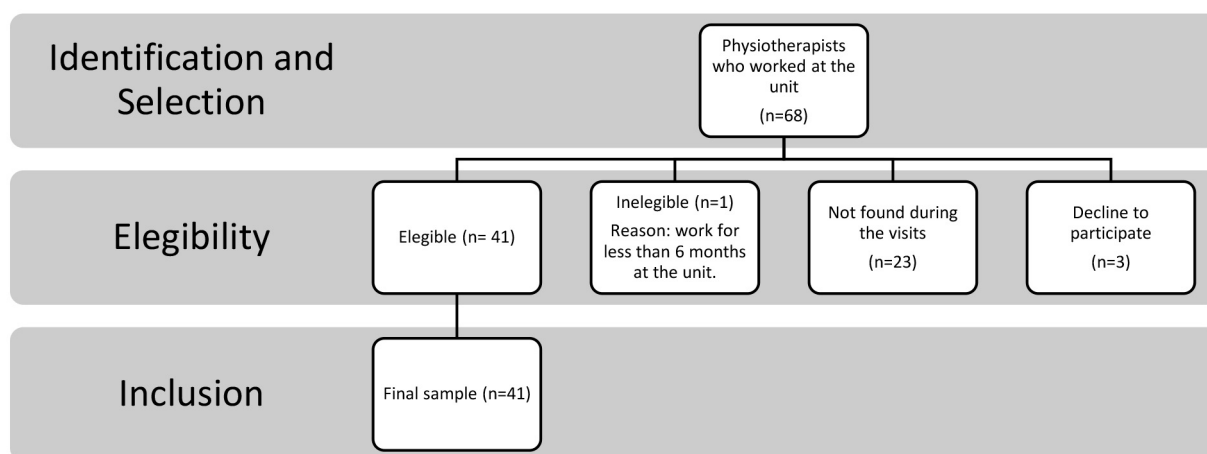
Data collection was conducted by two researchers previously calibrated for this purpose, during the period between May and June 2018, on days and time convenient to both parties, was made seven visits to the units. The professionals who accepted to participated were invited to a more reserved place, with privacy, avoiding any kind of exposure or embarrassment.

The data obtained from questionnaires were tabulated and analyzed with descriptive statistics using means and percentages using the program Microsoft Office Excel® version 2016, and later exposed through tables and graphs.

## Results

Out of the possibility of 68 physiotherapists being part of this study, only one was not included for not meet the inclusion criteria of working at the institution for at least six months. Furthermore, 23 physiotherapists were not found on visiting days and three of them declined to participate in the research. Thus, 41 professionals were included in this study, (Figure 1).

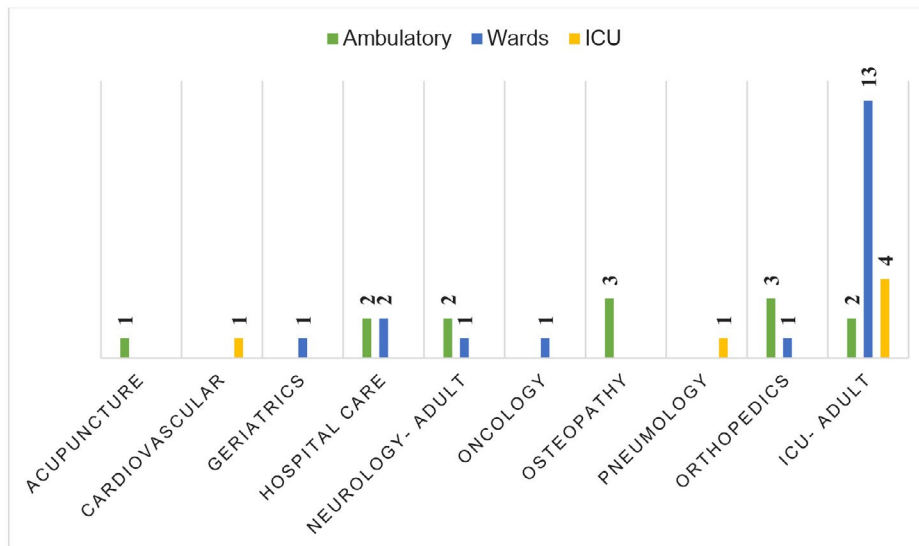
Figure 1. Flowchart of participants according to the STROBE Statement<sup>5</sup>



From these 41 participants, 51,3% (n= 21) worked at wards, 36,5% (n=15) with ambulatory service and 12,2% (n=5) at ICU. The sociodemographic, academic education and professional qualification profile are described at Table 1, women represented 56%, with age between 31-40 years old, graduated in a private higher education institution for an average of 6-10 years since graduation.

Most part of the physiotherapists, represented by 87,8% (n=36), affirmed to have specialization. At ambulatory service, 80% (n=12) have specialization, and one of them has two. Those professionals who affirmed not have a specialization was doing one when this research was done. At wards, 90,4% (n=19) have a professional specialization, where one of the physiotherapist were doing a second specialization and one of them who affirmed not have this title was also doing a specialization at the moment of this study. About the ICU, 100% of the participants are post graduate and similarly to the previous cases, one of the professionals has two post graduate degrees and another one was pursuing the second specialization. The areas of specialization of these professionals can be seen at Figure 2, being the specialization in ICU (Adult) the most cited among the physiotherapists who worked at ICU and at wards, followed by osteopathy, to the professionals working with outpatient service.

**Figure 2.** Area of specialization (Salvador, Ba, 2018)



Source: The authors (2020).

## Discussion

Describing a profile of physiotherapy professionals allows organizations and institutions to plan actions that favor the professional class, with educational actions<sup>6</sup>, in addition to proposing guidelines and actions that guide the physiotherapy performance with critical patients, improving techniques, allowing adequate training for physiotherapists<sup>7</sup>.

According to a survey done in 2018 by the World Confederation for Physical Therapy (WCPT)<sup>8</sup>, in Brazil, 75% of the total physiotherapists are women, which is in accordance with the current study, where the female population is present in greater numbers, being represented by 56% of the interviewed professionals. Badaró and Guilhem<sup>6</sup> found an even more discrepant number in their study, 83% of respondents were female, in a ratio of five women to one man. The authors confirm a change in professional gender profile once in the 90s, this proportion was nine women to just one man. Data by INEP for the year 2016 already showed a higher number of newcomers in physiotherapy courses for males (76.9%) compared to females (23.1%), which will probably influence the professional profile in relation to gender in the future<sup>3</sup>. Data from the present study do not identify such a marked difference between genders, possibly because they are professionals graduated in the transition period of this proportion, since 51.3% of the respondents have between six and ten years of graduation.

By the time of this study, there were in the state of Bahia 59 higher education institutions offering the course of physiotherapy in attendance and distance modalities, and of those only three universities are public, being them the State University of Southwest Bahia, which started offering vacancies for the course in 1998, the State University of Bahia, in 2006, and the Federal University of Bahia, in 2010, the latter two being located in the city of Salvador-BA<sup>9</sup>. Based on these data, it is understandable that 100% of the study sample graduated from private educational institutions, also considering the elapsed time of graduation, and the fact that the target population were professionals from the city of Salvador. Although the University of the Southwest of Bahia started offering vacancies for the physiotherapy course more than 20 years ago, possibly the professionals graduated there established themselves professionally in the interior of the state, since this institution was the only public institution outside the capital.

Post-graduation has been shown to be a fundamental part of the professional training of physiotherapists, and the number has been growing on a large scale in recent decades. In a study with physiotherapists from the state of Paraná, the data showed that between the years 1996 and 2000 only 5.8% of the professionals did a specialization. Ten years later, between 2006 and 2010, that number went up to 28.8% of the participants<sup>10</sup>. In the years 2006 and 2007 the number of physiotherapists with post

graduate degrees was 63.5%, of which 7.5% held two degrees<sup>6</sup>. This study confirms the growing number of physiotherapists who are specializing, where 87.8% of the sample have already completed specialization, showing that professionals have been doing professional qualification earlier and earlier to meet the specific needs of patients in their area of expertise, thus offering a better quality service.

Although it is different because it was a specific study in oncology, Borges and collaborators<sup>11</sup>, interviewed 30 physiotherapists from 13 hospitals in the Federal District and it was observed that 86.7% of the professionals did some kind of specialization in several areas, being the most common specialization in trauma-orthopedics by 30.2% of physiotherapists, followed by the pulmonary rehabilitation area, with 20.9% of professionals, while specializations in cardiology and adult ICU were carried out by 7% of the interviewed physiotherapists.

In a study by Nozawa et al.<sup>7</sup>, about the profile of physiotherapists working in the ICU, 71% of professionals had specialization courses in intensive care or cardiorespiratory therapy. In our study, this amount is 100% of the physiotherapists, drawing attention to the fact that 56% of all professionals interviewed have specialization focused on areas of hospital practice, intensive care or hospital care, which shows a concern of these professionals in the continuing education to meet the specific needs of these patients. Data related to the profile of the physiotherapist in other hospital settings were not found in the researched literature.

In a relationship about the graduate time and the area of performance, it was possible to observe that 80% of the physiotherapists working in the ICU have a time of graduation between 1-10 years and also have specialization in adult ICU, being possible to be explained by the fact that the professional specialty of physiotherapy in intensive care was only recognized by the Federal Council of Physiotherapy and Occupational Therapy through Resolution N° 402 in 2011, that is, less than 10 years since the specialty was recognized<sup>12</sup>.

Bispo Júnior<sup>13</sup>, in 2009, made a reflection on the graduation concept in physiotherapy and the profile of these professionals and noted that the

physiotherapists still presenting the curative-rehabilitation concept that gave rise to physiotherapy, however a change in the performance of these professionals was necessary since the epidemiological profile of the population was also changing. Thus, through this study it was possible to observe that during these 10 years (2009-2019) professionals have specialized in several areas, moving away from the rehabilitation line that mainly involves orthopedics and neurological patients, and expanding the service to other sectors of performance, such as oncology, cardiology and pulmonary rehabilitation.

As a limitation of the study, it should be noted that the data were collected in only one hospital, and being it from the public network, not allowing a comparison between different public and private institutions. Furthermore, the study presents a limited sample, with a reduced number of volunteers.

## Conclusion

Based on the results of this study, it can be concluded that the professional in the field of physiotherapy who works in the selected public hospital is primarily female, aged 31-40 years old, graduated from a private institution for an average of six to ten years and with at least one specialization in progress and/or completed.

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## Author contributions

Martins GB participated in the study conceptualization and design, data interpretation, manuscript writing and critic review. Jesus AS participated in the study conceptualization and design, collection of data, data analysis and interpretation and manuscript writing.

## Competing interests

No financial, legal or political conflicts involving third parties (government, companies and private foundations, etc.) have been declared for any aspect of the submitted work (including, but not limited to, grants and funding, participation in advisory council, study design, preparation of manuscript, statistical analysis, etc.).

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