Characterization of the Nutritionist in the teaching role in National Programs of Nutrition and Dietetics.

Cinthya Espejo Alvarado^{1,4[0009-0006-8313-5905]}, Karen Basfi-Fer Obregón^{3,4[0000-0002-9824-0162]}, Andrea Muñoz Cerda^{2,4[0000-0001-7366-368X]}, Paola Cáceres Rodriguez^{3,4[0000-0001-6310-9394]}

- ¹Departamento Medicina Interna, Universidad de La Frontera, Francisco Salazar 01145, Temuco, Chile.
- ²Departamento Salud Pública, Universidad de La Frontera, Francisco Salazar 01145, Temuco, Chile.
 - ³Departamento de Nutrición, Universidad de Chile, Independencia 1027, Chile
 - ⁴Red de Innovación e Investigación en Docencia (RIID) para la formación del Nutricionista

paolacaceres@uchile.cl

Abstract. Teaching in Nutrition and Dietetics (N&D) programs, especially in specialized courses, is performed by professional nutritionists, who do not necessarily have training in teaching. The objective of this study was to characterize the sociodemographic, work, academic, and teacher training and induction aspects of nutritionists who teach in national programs. A descriptive cross-sectional study was carried out by means of an online survey to teachers of different N&D programs that are part of the Council of Rectors of Chilean Universities (CRUCH). Seventy-four complete responses were obtained, where it was observed that the professors are mostly women, under 40 years of age, with a master's degree, working on contract, full time, spending most of their time on teaching and administrative management. With respect to induction and training in teaching, only 33.8% say they have had it, while 64.9% have a diploma in this area. The work characteristics are heterogeneous among the teaching staff, and the low level of induction to teaching and the absence of minimum training and/or perfectioning to practice this role, which demands more and more preparation to face current challenges, are a matter of concern. Resumen.

Key words: health education, teacher education, teacher training programs, higher education, nutritionists.

1 Introduction

University teachers, in contrast to school teachers, are not required to have pedagogical and/or andragogical training, which makes possible the existence of teachers with heterogeneous levels of training and induction to teaching. On the other hand, each institution has a different employment system. The objective of this study was to characterize teachers participating in N&D programs at the national level, in order to establish a baseline of their personal, academic, work and teacher training/induction characteristics.

2 Theoretical Framework

In the formation of professionals, a teacher is required who, in addition to knowledge of the discipline, has specific pedagogical knowledge for the level at which he/she works (Henao Castaño et al., 2010, 34-32). Disciplinary knowledge alone does not guarantee an adequate teaching practice, considering the demands of the new generations (Espinoza Freire et al., 2017, 39-53). It is common for professionals in a discipline to be the ones in charge of its training (Pérez V et al., 2013, 787-792), regardless of their training or background in teaching. In addition, being part of a curriculum based on competencies, technical and generic, that aim at a specific graduate profile, requires knowledge, skills and abilities beyond the mere handling of the discipline.

3 Methodology

Cross-sectional, descriptive, exploratory study, approved by the ethics committee of the Universidad Católica del Norte. A semi-structured survey was conducted, applied online to nutritionists working as teachers in N&D programs in the country, who agreed to participate voluntarily and anonymously after signing an informed consent form. The survey consisted of 3 characterization items: sociodemographic, academic-work and training and induction to teaching work. Descriptive statistical analysis was performed using SPSS v 16.

4 Results

Of the total number of people surveyed (74), 83.7% are female, with an average age of 38 years (27 to 53). The majority (48.65%) graduated between 2011 and 2021, and the highest academic degree obtained (71.62%) is a master's degree. Regarding the years of professional practice, 45.9% have between 1 and 10 years. It is observed that 74.65% have a full-time job. Regarding the type of contract, 56.76% are on contract, 32.43% on staff and 10.81% on a fee basis. Regarding the academic work performed, teaching and administrative management concentrate the greatest number of hours dedicated to teaching (41.8% dedicate between 11 and 22 hours to teaching). The academic and teacher training characteristics are described in Table 1.

Table 1. Characterization of Teaching Nutritionists

Academic Hierarchy Attained (%)	Training in University Teaching (%)	Type of Affiliated Career (%)	Teaching Performance Area (%)
Non-ranked (12.2)	Internal short training courses (77)	None (23))	Basic Courses (25.7)
Instructor/Novice (29.7)	External short training courses (44.6)	Teaching/Professorial Career (58.1)	Disciplinary Courses (86.5)
Assistant Professor (41.9)	External courses, > 40 hrs (35.1)	Regular Career/Researcher (13.5)	Supplementary Courses (29.7)
Associate Professor (13.5)	Diploma (64.9)	Both (5.4)	Clinical Tutor/Teaching in Healthcare Setting (37.8)
Full Professor (2.7)	Master's degree (37.8)		
	Doctorate (1.4)		

Regarding the induction received, 63.5% have received informal induction at the institutional level and this decreases to 33.8% of specific induction to the teaching work (Table 2). A total of 60.9% are satisfied or very satisfied with this process.

Table 2. Type of Induction and Support Received by Teaching Nutritionists from the Institution

Type of Teaching Induction (%)	Type of Teacher Support Provided by the Institution (%)
None (18.9)	None (4.1)
Informal peer induction (38.2)	Occasional training (28.4)

Informal induction by superiors (24.3)

Regular training (33.8)

Mentoring/Academic tutoring (6.8)

Diploma program (50) Feedback on teaching (37.8)

Classroom visits (9.5)

5 Discussion

This study evidences the heterogeneity of the working conditions and training and induction in teaching and/or coaching presented by the professors of N&D programs. For Huguet, et al. (2018), the pedagogical training of teachers in Health Sciences is an essential element, constituting one of the ways to achieve the necessary psycho-pedagogical and research preparation. However, Orellana, et al. (2020) points out that teaching in health is generally exercised without adequate preparation in pedagogy. This contrasts with our results since a large percentage of respondents have teaching preparation. The training of health professionals requires teachers who, in addition to specific knowledge, have pedagogical knowledge (Henao, 2010), this training being fundamental in this area (Villalobos, 2010), since teaching is more than just a facilitating function (Moreno, 2012). Teacher induction and coaching is one of the weak aspects observed in this study, agreeing with Rodriguez (2020), who points out that most institutions lack formal induction processes, which leads to the fact that new teachers face difficulties in the teaching-learning process.

6 Conclusions

At the present time, it is not known who are the professionals who teach in universities that offer N&D, with respect to their education, working conditions and teacher training. This study shows that their work situation is heterogeneous, with a low percentage of them having received an induction to teaching and the lack of minimum requirements for improvement and/or training in this area.

7 Limitations and Future Research

Due to the large number of N&D programs in the country, this sample is not representative of the existing teaching staff; however, it is the first study that explores this topic in depth. Future research could focus on how to prepare teachers to homogenize their competencies. It could also be investigated how these teachers with a lack of teacher induction and/or minimum requirements of improvement and/or training in the pedagogical area could affect the teaching-learning processes. The role of universities in internal teacher training processes should also be studied.

Referencias

- Espinoza Freire, E. E., Tinoco Izquierdo, W. E., & Sánchez Barreto, X. d. R. (2017, abril-junio). Características del docente del Siglo XXI. *Olimpia*, *14*(43), 39-53.
- Henao Castaño, Á. M., Núñez Rodríguez, M. L., & Quimbayo Díaz, J. H. (2010, Abril). El rol del proffesional de salud como docente universitario. *Aquicham*, *10*(1), 34-42. http://www.scielo.org.co/scielo.php?script=sci_arttext&pid=S1657-59972010000100004
- Huguet Blanco, Y., Quintana Gómez, F., Franco Pérez, P. M., & Sosa Fleites, I. M. (2018). Preparación de profesores en ciencias médicas: una visión desde las páginas de EDUMECENTRO. *EDUMECENTRO*, 10(3), 174-193. http://scielo.sld.cu/scielo.php?script=sci_arttext&pid=S2077-28742018000300012
- Orellana Franco, E. O., Juanes Giraud, B. Y., Orellana Arévalo, O., & Orellana Arévalo, F. (2020, junio 02). Formación pedagógica de los docentes de la carrera de medicina en Ecuador. *Revista Universidad y Sociedad*, *12*(3), 176-184. http://scielo.sld.cu/scielo.php?script=sci_arttext&pid=S2218-36202020000300176
- Pérez V, C., Fasce H., E., Coloma N., K., Vaccarezza G., G., & Ortega B., J. (2013, junio). Percepción de académicos de carreras de la salud de Chile sobre el perfeccionamiento docente. Revista médica de Chile, 141(6), 787-792. http://dx.doi.org/10.4067/S0034-98872013000600014
- Rodríguez Torres, Á. F., Medina Nicolalde, M. A., & Tapia Medina, D. A. (2020, 12 21). La inducción y el acompañamiento pedagógico al profesorado novel. Una oportunidad para mejorar su desempeño profesional. *Educare*, *24*(3), 339-361. https://doi.org/10.46498/reduipb.v24i3.1378
- Villalobos Claveria, A., Melo Hermosilla, Y., & Perez Villalobos, C. (2010, diciembre). Ser profesor universitario en una universidad regional de Chile: Perspectivas de docentes no pedagogos. *Paradígma*, *31*(2), 37-51. http://ve.scielo.org/scielo.php?script=sci_arttext&pid=S1011-22512010000200004&lng=es&nrm=iso&tlng=es