

# Working status of Spanish pediatric surgeons

M. Díaz Diñeiro<sup>1</sup>, L. Martínez Martínez<sup>2</sup>, N. García Soldevila<sup>1</sup>, M. López Santamaría<sup>2</sup>

<sup>1</sup>Pediatric Surgery Department. Malaga's Regional University Hospital. Málaga (Spain). <sup>2</sup>Pediatric Surgery Department. La Paz Pediatric University Hospital. Madrid (Spain).

## ABSTRACT

**Objective.** To analyze work, demographic, and social parameters in order to learn about the working status of pediatric surgeons in Spain.

**Materials and methods.** A survey inspired in job satisfaction models and designed by the authors was performed. It was an observational, descriptive, cross-border online survey intended for pediatric surgeons from the Spanish Society of Pediatric Surgery (SECIPE).

**Results.** Of the 290 SECIPE pediatric surgeons, 133 responded to the survey (45.8% response rate), of whom 49.6% were 30-39 years old. The number of male and female respondents was virtually the same. 69% of respondents devoted 75-100% of their working hours to healthcare, 89.4% devoted 0-25% to research, and 80% devoted 0-25% to teaching. The survey demonstrated job satisfaction in terms of colleagues, healthcare role, professional development expectations, and social consideration. However, respondents showed disconformity with their pay, the time devoted to research and teaching, and their relationship with the executive board.

**Conclusion.** This study sheds light on the Spanish professionals' working status, which can help identify measures for improvement. The survey shows widespread disconformity with the short time devoted to research, and little satisfaction with teaching. Most of the working hours are devoted to clinical practice, with poor pay satisfaction, which can contribute to dissatisfaction in the development of healthcare activity.

**KEY WORDS:** Job satisfaction; Pediatric surgery.

## SITUACIÓN DE LOS PROFESIONALES DE CIRUGÍA PEDIÁTRICA EN ESPAÑA

### RESUMEN

**Objetivo.** Analizar parámetros sociolaborales y sociodemográficos para conocer la situación de los cirujanos pediátricos en España.

**Material y métodos.** Se realizó una encuesta de elaboración propia inspirada en modelos de satisfacción laboral. Es un estudio observacional, descriptivo y transversal, realizado *online* a los ciru-

janos pediátricos pertenecientes a la Sociedad Española de Cirugía Pediátrica (SECIPE).

**Resultados.** De los 290 cirujanos pediátricos de la SECIPE, 133 contestaron a la encuesta (tasa de respuesta de 45,8%). De estos, el 49,6% tienen entre 30-39 años, habiendo casi igualdad entre hombres y mujeres. El 69% de los encuestados dedican entre el 75 y el 100% de su tiempo de trabajo a la asistencia, el 89,4% dedica entre 0-25% a la investigación y el 80% entre 0 y 25 % a la docencia. Los resultados mostraron satisfacción laboral tanto en relación con el equipo de trabajo como con la calidad asistencial, las posibilidades de desarrollo profesional o la consideración social. Sin embargo los encuestados mostraron su disconformidad con respecto al sueldo, al tiempo dedicado a la investigación y a la docencia, y a la relación con la dirección.

**Conclusión.** Este estudio permite conocer la situación laboral de los profesionales en España, lo que puede ayudar a identificar medidas de mejora. La encuesta señala un descontento generalizado con el escaso tiempo dedicado a la investigación y poca satisfacción en el trabajo docente. La mayor parte del tiempo se dedica a la práctica clínica, existiendo baja satisfacción salarial, circunstancias que pueden contribuir a la insatisfacción en el desarrollo de la actividad asistencial.

**PALABRAS CLAVE:** Satisfacción laboral; Cirugía pediátrica.

## INTRODUCTION

In the last century, pediatric surgery gradually segregated from general surgery. It started at Hospital del Niño Jesús, and it kept developing in the 50s, with the emergence of small groups in Madrid, such as Maternidad Provincial's neonatal surgery, directed by Julio Monereo González (1924-1977), Hospital de la Cruz Roja, led by Blas Agra Cadarso (1925-2012), or Cátedra de Madrid, managed by Gutiérrez Guijarro. Groups also appeared in Barcelona (Hospital de Santa Cruz y San Pablo, with Antonio Raventós Moragas, 1904-1975) and Santiago de Compostela (Hospital Clínico, with Manuel Moreno de Orbe, 1922-2002)<sup>(1)</sup>. Pediatric surgery departments were subsequently created all over Spain, up to today's 47 units

**Corresponding author:** Dra. María Díaz Diñeiro.

E-mail: mdiazdi@gmail.com

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and departments. Pediatric surgery education is included as an independent specialty in the Spanish postgraduate system (MIR), with a 5-year duration, and 22 positions on offer in the last year<sup>(2)</sup>.

Today, there are various studies on the working status of professionals from wider medical specialties such as family medicine,<sup>(3,4)</sup> but there are no data regarding the working status of Spanish pediatric surgeons, which is not the case in other countries<sup>(5-8)</sup>.

Job satisfaction was defined by Locke<sup>(9)</sup> in 1976 as a “pleasurable or positive emotional state resulting from the appraisal of one’s job or job experiences”. It evaluates employee conformity with working conditions and working environment. One of the most widely acknowledged theories in the field of job satisfaction is Herzberg’s two-factor theory<sup>(10)</sup> (1959), which established two groups of working aspects: extrinsic factors and intrinsic factors. Extrinsic factors refer to working conditions in a wider sense, such as pay, corporate policies, physical environment, safety at work, promotion expectations, relationship with your colleagues and your boss, and family and career balance incentives. In 1979, Warr, Cook, and Wall developed NTP 394 overall job satisfaction survey<sup>(11)</sup>, which reflected workers’ experience in a paid job while gathering their affective response to the job itself. Data collection in our survey was inspired by NTP 394, to which social, professional, and pediatrics-related questions were added.

Psychosocial risk factors inherent to the physician’s job (contact with suffering and death, work overload, negative impact on family life) are widely known<sup>(12)</sup>. Exhaustion, attrition, or mental fatigue, known as “burnout”, can be regarded as some sort of affliction caused by overstrain that occurs in the form of severe energy loss and reduces performance and quality<sup>(13,14)</sup>. This syndrome decreases quality of life, which deteriorates the organizations these people work in and translates into poorer professional services on their part<sup>(15)</sup>.

This study was aimed at analyzing the current status of pediatric surgeons in Spain, both at the social and demographic level, and at the social and work level. The objective was to learn about pediatric surgeons’ age, population, and working hour distribution, and to probe on their satisfaction in terms of social consideration, pay, and relationship with their colleagues.

## MATERIALS AND METHODS

An observational, descriptive, cross-border study was carried out by means of a NTP 394 (*Network Time Protocol*): *Overall Job Satisfaction*<sup>(11)</sup> inspired survey designed by the authors and distributed online among the 290 surgeons that make up the Spanish Society of Pediatric Surgery. Data were collected from October to November 2019 (Table 1).

## RESULTS

The survey was responded by members of the Spanish Society of Pediatric Surgery from all over Spain. Society members working in other countries (namely Sweden, Mexico, Peru, Argentina, and Cuba) also replied. 96% of respondents worked in a public hospital, 68.9% of whom also worked at a private consultation. 49.6% of respondents were 30-39 years old, and 21% were 50-59 years old (Table 2). The percentage of male respondents was slightly higher than that of female respondents (51.9% vs. 48.1%). 57% completed their university degree after 2000, and 66% earned their specialist diploma after that year, too.

Regarding how respondents distributed their working hours, 69% devoted 75-100% to healthcare (Fig. 1), while 71.2% devoted 0-25% to management (Fig. 2). Most respondents (89.4%) barely devoted any time to research (0-25%), whereas none of them had a full-time research position (Fig. 3). Most respondents (80.3%) did not devote any time to teaching (0-25%) (Fig. 4). Of those involved with university (35%), all of them were associate lecturers. There were no main lecturers, and only one professor.

The survey also assessed satisfaction regarding various work aspects, with 65% of respondents having a high or very high satisfaction degree with their team. 70% had a high or very high satisfaction degree with their healthcare role, and 52% had a high or very high satisfaction degree with their social consideration. In terms of satisfaction with the executive board, 33% had a poor or very poor satisfaction degree. 52% had a high satisfaction degree with their professional development expectations. Regarding their teaching role, 38% had a poor or very poor satisfaction degree. 66% of respondents had a poor or very poor satisfaction degree with their research role, and 48% had a poor or very poor satisfaction degree with their pay (Table 3).

## DISCUSSION

Our study shows a reality that had not been assessed before – the working and social status of Spanish pediatric surgeons. The professionals’ subjective perspective reflects the pros and cons of our daily clinical practice, as well as population distribution.

The survey was responded by surgeons from all over Spain, which means all regions were represented. The least represented were those under 30 years old, but there may be a bias since they are not all members of the society. All respondents had a healthcare role, which means none of them had a management role only.

We consider the 45.9% response rate to be acceptable, similar to that of similar studies<sup>(3-8)</sup>.

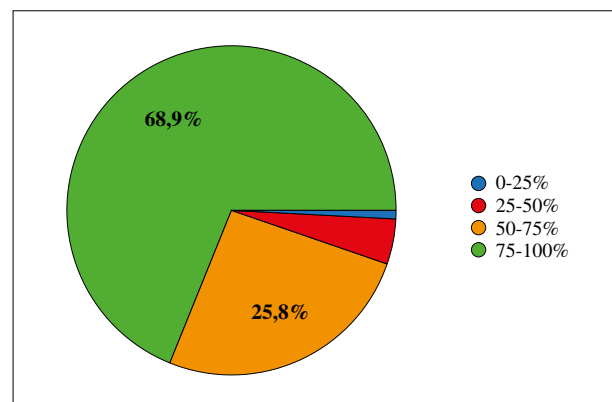
The survey demonstrates respondents were satisfied with their team and healthcare role. Professional development expectations and social consideration were average.

**Table 1. Survey designed by the authors to learn about the working status of Spanish pediatric surgeons.**

<i>Question</i>	<i>Answer options</i>
Province of work	
Age	
Sex	
When did you complete your degree?	
When did you earn your diploma?	
Of your working hours, how many do you devote to healthcare?	0-25% / 25-50% / 50-75% / 75-100%
Of your working hours, how many do you devote to management?	0-25% / 25-50% / 50-75% / 75-100%
Of your working hours, how many do you devote to research?	0-25% / 25-50% / 50-75% / 75-100%
Of your working hours, how many do you devote to teaching?	0-25% / 25-50% / 50-75% / 75-100%
Teaching position	Profesor titular, profesor asociado, catedrático, no actividad docente
Do you work in a public hospital?	Yes/No
Do you work at a private consultation?	Yes/No
Satisfaction degree with your team	1 (very poor) / 2 (poor) / 3 (average) / 4 (high) / 5 (very high)
Satisfaction degree with your healthcare role	1 (very poor) / 2 (poor) / 3 (average) / 4 (high) / 5 (very high)
Satisfaction degree with your social consideration	1 (very poor) / 2 (poor) / 3 (average) / 4 (high) / 5 (very high)
Satisfaction degree with your executive board	1 (very poor) / 2 (poor) / 3 (average) / 4 (high) / 5 (very high)
Satisfaction degree with your professional development expectations	1 (very poor) / 2 (poor) / 3 (average) / 4 (high) / 5 (very high)
Satisfaction degree with your teaching role	1 (very poor) / 2 (poor) / 3 (average) / 4 (high) / 5 (very high)
Satisfaction degree with your research role	1 (very poor) / 2 (poor) / 3 (average) / 4 (high) / 5 (very high)
Satisfaction degree with your pay	1 (very poor) / 2 (poor) / 3 (average) / 4 (high) / 5 (very high)

**Table 2. Age.**

<i>Age</i>	<i>Percentage</i>
Under 30 years old	2.2%
30-39 years old	49.6%
40-49 years old	13.5%
50-59 years old	21%
60-65 years old	3.7%
Over 65 years old	9%

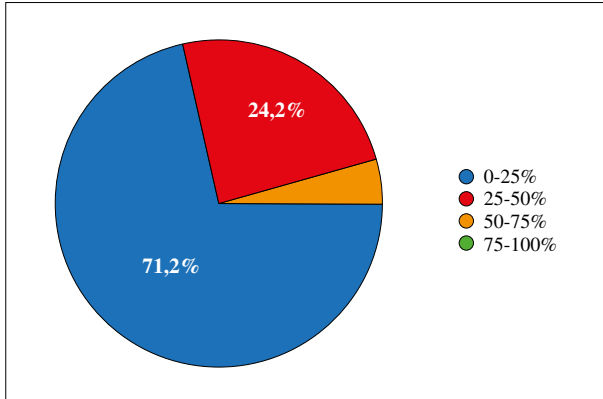


**Figure 1. Time devoted to healthcare.**

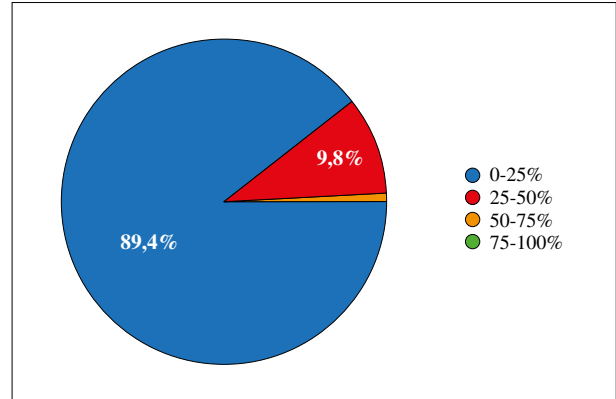
Respondents showed disconformity with their pay, the time they devoted to research and teaching, and their relationship with the executive board.

The survey revealed that pediatric surgeons are focused on clinical practice, since 68.9% of respondents devoted 75-100% of their working hours to healthcare. Surgery, as an intellectual activity, requires some working hours are devoted to research and teaching, apart from management. For instance, including a patient in a waiting list is a management task. Therefore, the healthcare system should provide professionals with safe work spaces, rest areas,

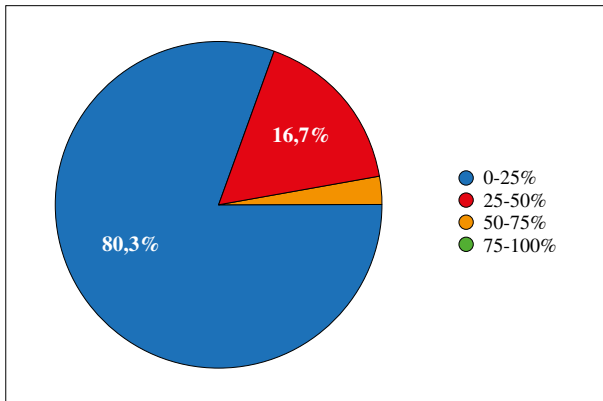
and breaks; facilitate research and teaching with specific time slots for these activities; and promote family and career balance. Healthcare overload, lack of research and teaching, and inadequate pay can favor stress and anxiety, which may translate into burnout or professional attrition (physical, mental, and emotional exhaustion). From January 1, 2022, this will be considered as a disease by the World's Health Organization, once revision number 11 of



**Figure 2.** Time devoted to management.



**Figure 3.** Time devoted to research.



**Figure 4.** Time devoted to teaching.

the International Statistical Classification of Diseases and Related Health Problems (CIE-11) has been approved<sup>(16)</sup>. However, job dissatisfaction has been found not to be necessarily connected with high emotional exhaustion levels, which are compatible with job satisfaction. This is the case because pediatric surgeons are satisfied with their job for vocational reasons, but at the same time, they have to cope with hard work conditions which cause attrition<sup>(17)</sup>.

The results demonstrate there are very few pediatric surgeons working at Spanish universities. This can be explained by the fact our specialty has no specific department, since it is typically included in pediatrics or general surgery; and developing an academic career in such an environment is difficult. Every hospital should provide ongoing education or facilitate access to research lines. As surgeons, we should also try harder to be part of these groups. However, pursuing studies is difficult considering how large the scope of action is, how short series are, how much time is required to see results, how many learning curves there are, and how many ethic issues are involved<sup>(18)</sup>.

The main limitation of our study lies in the fact it was a descriptive and non-analytical one, which means it does not allow for statistical comparison of the different variables. It reflects facts, but also subjective opinions. In addition, the survey had not been validated, and the response rate was average. Since it was an anonymous survey, no distinction was made between physicians, heads of unit, and heads of department.

Therefore, our study, which attempted to analyze the working status of pediatric surgeons in Spain, could lay the foundations for conducting SWOT analyses in the various departments to be submitted to the executive board.

**Table 3.** Job satisfaction.

	1 (very poor)	2 (poor)	3 (average)	4 (high)	5 (very high)
Satisfaction with your team	3.8%	3%	28%	34.8%	30.3%
Satisfaction with your healthcare role	2.3%	4.5%	22%	44.7%	26.7%
Satisfaction with your social consideration	3.1%	16.8%	29.8%	32.8%	17.6%
Satisfaction with your executive board	15.3%	17.6%	31.3%	28.2%	7.6%
Satisfaction with your professional development expectations	11.4%	12.1%	23.5%	42.4%	10.6%
Satisfaction with your teaching role	15.7%	22.8%	32.3%	21.3%	7.9%
Satisfaction with your research role	33.1%	33.1%	22%	7.9%	3.9%
Satisfaction with your pay	22.7%	23.5%	32.6%	15.9%	5.3%

Through internal (weaknesses and strengths) and external analyses (threats and opportunities), this tool provides an actual diagnosis of the department that allows human capital to be assessed through singular skill analysis, and it can help implement measures to address job dissatisfaction in the relevant areas.

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