

# The role of Spanish health libraries in scientific publication

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## Abstract

*Health libraries have been established as publication support services. Despite its importance, there is currently no study about the services that these centers offer. The aim of this work is to understand the role that libraries play in institutional scientific publishing policies. The sample was taken from the National Catalogue of Hospitals, the list of libraries of the Catalogue of Periodicals in Spanish Health Sciences Libraries (c17) and the National Catalogue of Health Sciences Publications (CNCS). Subsequently, virtual health libraries have also been incorporated. From this list, a questionnaire about library staff and activities related to publication process was sent. We obtained a participation rate of 61.21%. The average number of technical personnel was 1.15 in virtual libraries and 0.81 in hospital libraries. The activities carried out have been: training activities (82.2%), counselling (90.1%), dissemination (30.7%) and evaluation (50.5%). The staff in libraries are insufficient. In many cases technicians assume an overwork of serving in both (virtual and hospital libraries). Most libraries offer training and research support services although there are differences between virtual and hospital ones. There is a relationship between the number of technicians and the publication support services.*

**Key words:** hospital libraries; virtual libraries; research support; health sciences; surveys.

## Introduction

In addition to their own functions, clinicians carry out research activities. Scientific research is an opportunity for progress and continuing education, insofar as it promotes understanding, questions the meaning of things and helps to solve problems.

Such is the importance of scientific publications in the curriculum of researchers that publications have become the tool for assessing their quality (1). Therefore, the clinician is required to have a thorough and rigorous knowledge of the research and publication process.

## The role of libraries

Since their inception, most Spanish hospital libraries (HLs) have been considered one of the 7 basic services of any hospital aspiring to be accredited (2). Among

the tasks they usually perform (3-6) are: search and location of information (7, 8), training services (9, 10), counselling, dissemination, and assessment services (3, 11-14).

However, one of the limitations that clinicians have had in terms of scientific publication is the access to these services. Only those hospitals with a library had documentary support services available. As a result of this lack, in recent years we have witnessed the creation of Virtual Health Libraries (VHLs) (15), which provide resources and services to all healthcare professionals regardless of their place of work. There are currently 15 VHLs in Spain in the different autonomous communities. In the cases of Comunidad Valenciana and La Rioja, they did not have a VHL at the time of the study.

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Thus, and despite the importance of libraries in the development of publishing, the few located studies are to be found in university libraries, and in different geographical and/or cultural contexts. However, there is no study in Spain that reflects the services that these centres offer in their institutions, or the consequences of the creation of VHLs on the workload of librarians. Therefore, the aim of this paper is to find out the role played by health libraries in the scientific publication of their users and institutions. That is, to quantify the number of staff assigned to libraries, the services they offer and the visibility/recognition that their work has in the institution.

### Material and methods

In order to carry out our work, we have conducted a survey. The process of preparation is as follows:

- a. selection of the sample: the 2018 National Catalogue of Hospitals (16) was taken as a reference, completed with the list of libraries from the c17 (17) and the CNCS (18). We obtained a total of 165 libraries. Official mail and contact telephone numbers were collected. Subsequently, VHLs were also incorporated (a total of 15);
- b. creation of a questionnaire: the surveys were carried

out using the Google Forms tool. The questionnaire was structured in two blocks: 1) library staff (number of technical and administrative staff); and 2) activities related to the publication process, training activities (counselling, dissemination), and evaluation and/or measuring.

Once the questionnaire was developed, an email was sent to all identified libraries, with the link to the survey and the explanation of this study to both HLs and VHLs (both available at <https://runa.sergas.gal/xmlui/handle/20.500.11940/14281>). The mailing was reinforced by telephone calls to the libraries.

The data obtained were downloaded into Excel for further analysis.

### Results

A total of 165 libraries were identified (15 virtual libraries and 150 hospital libraries), of which 101 responded (participation rate 61.2%). Of these, 11 corresponded to VHLs and 90 to HLs. The main results obtained are presented below.

*Library staff:* the results of our study show significant differences, both between VHLs and HLs and among the different autonomous communities (Table 1).

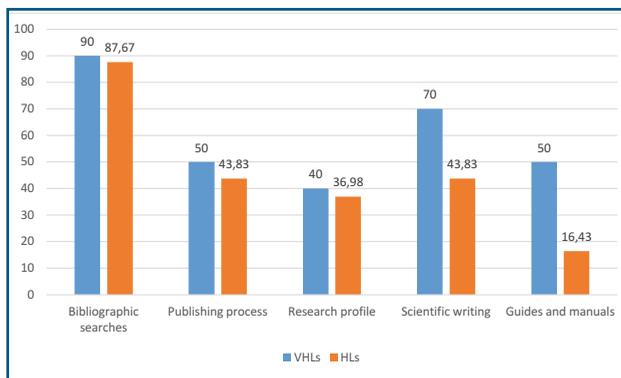
	No. of libraries		In-house technical staff		In-house administrative staff	
	VHL	HL	VHL	HL	VHL	HL
Andalucía	1	8	4	8	1	1
Aragón	1	3	*	2	0	2
Canarias	1	3	0	1	1	3
Cantabria	NR	NR	NR	NR	NR	NR
Castilla La Mancha	1	6	*	5	0	4
Castilla y León	1	7	1	3	1	4
Cataluña	NR	6	NR	6	NR	2
Comunidad Valenciana	0	10	NR	7	NR	7
Extremadura	1	6	*	3	0	6
Galicia	1	6	*	6	*	9
Islas Baleares	1	1	3,5	1	3	0
La Rioja	0	1	NR	0	NR	1
Comunidad de Madrid	1	20	2	18	1	18
Murcia	NR	1	NR	1	NR	1
Navarra	NR	NR	NR	NR	NR	NR
País Vasco	1	4	1	5	1	5

**Table 1.** Summary table of staff data for VHLs and HLs, by autonomous community.

\* Shared staff NR: No reply 0: No virtual library

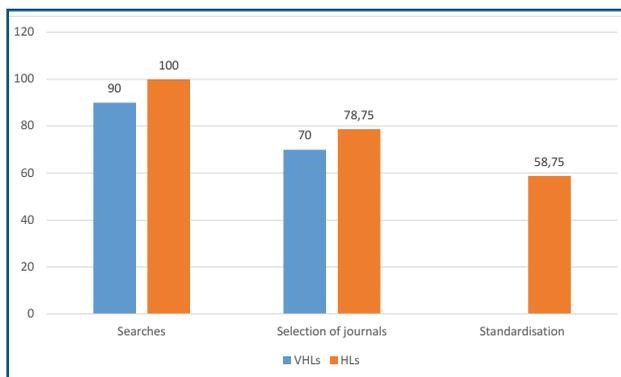
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**Training activities:** 82.2% of the libraries state that they have some kind of training activity in the field of publishing (10 VHLs and 73 HLs). When asked open questions, libraries state that they carry out other types of activities, such as publicizing the VHL and its services, or specific training in search tools (Figure 1).



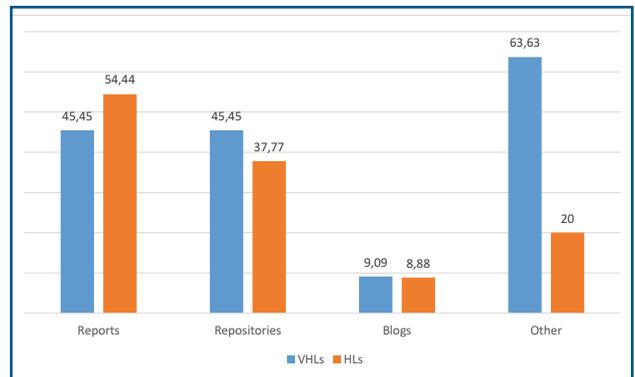
**Fig. 1.** Training activities carried out in virtual and in-person libraries (%).

**Counselling activities:** 90.1% of the libraries state that they provide some kind of supporting on scientific publication process (in the case of VHLs, all of them; in the case of HLs, 80) (Figure 2). Of the 90 libraries offering publishing counselling, 50 include this function in their portfolio of services.



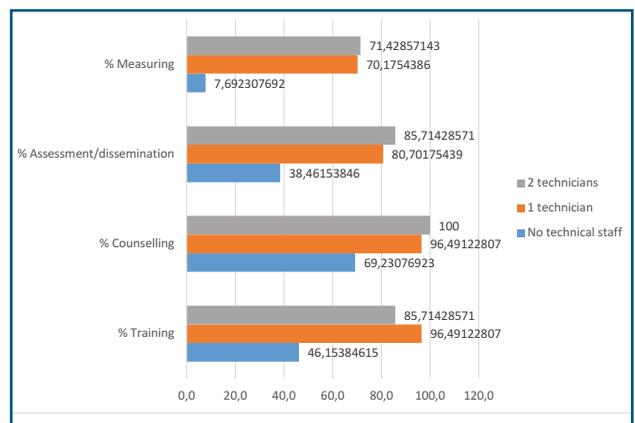
**Fig. 2.** Counselling activities carried out by libraries.

**Dissemination activities:** 30.7% of the libraries are part of their institution's research plan (2 VHLs and 29 HLs). However, 70.3% of them carry out dissemination activities of their institution's scientific activity (9 VHLs and 62 HLs) (Figure 3).



**Fig. 3** Main dissemination activities carried out by the libraries.

**Assessment and/or measuring of scientific output:** of the 101 libraries included, 50.5% (4 VHLs and 47 HLs) declared that they regularly measure the scientific production of their institution. On the other hand, we have assessed the support given to scientific publications by the HLs in terms of availability of technical staff. We found a clear relationship between the availability of staff and the increase in such support (Figure 4).



**Fig. 4.** Publication support activities according to the number of technical staff available in the HLs.

All VHLs (except for the Canary Islands) are supported by technical staff. However, we cannot quantify the number and time of dedication in the 5 using staff from the HLs. In any case, they all provide support services, with greater or lesser diversity.

## Discussion

*On libraries:* despite the requirement for a library service in hospitals with certain characteristics, many libraries have disappeared or have been deprived of staff (technical and/or administrative). This situation has been aggravated by the pandemic of recent months. In addition to non-compliance with regulations, this has led to an impoverishment of the scientific productivity and visibility of hospitals.

*On staff:* according to our survey, the number of technicians is relatively unsatisfactory. There are three elements to highlight:

- HLs. The average number of technical staff is 0.81. Although this figure is insufficient, it should be added that 26 HLs in 12 autonomous communities declare that they have no technical staff;
- VHLs. This is a service that is generally offered to an entire health system of an autonomous community, so that 1.8 technicians per VHL are insufficient. To this must be added the fact that 5 VHLs are equipped with library staff from their corresponding community, which implies a workload for the technical staff that is rarely visible and even less often recognised;
- furthermore, in addition to the more technical tasks (information search, counselling or training services), libraries have more administrative tasks associated with them, which are equally relevant (document retrieval services, etc.). These tasks were traditionally carried out by administrative staff. The data offered are much lower than desired. The fact that a library is not equipped with administrative staff means that these rather routine tasks must be carried out by technical staff, overburdening them and underutilising the human resources of the institution.

*On scientific publication support activities, training:* libraries have always assumed training to be necessary for researchers and the institutions to which they belong (9, 10). 82.2% of libraries carry out some training activity on a regular basis. As might be expected, bibliographic search courses are the most popular. We understand that this is due both to the need of researchers to carry out their work, and to the library tradition in this type of training activities. To a lesser extent, libraries perform essential tasks for scientific publication (publication process of scientific journals, researcher profiling, scientific writing, etc.). However,

we found some significant differences between VHLs and HLs, as regards courses on scientific writing and preparation of guides and manuals. Although we do not know the reasons for this difference, we understand that this could be due to three reasons: a) the absence of technicians trained in these activities and/or subjects, b) the work overload preventing training activities from being carried out, c) the distribution of training tasks between VHLs and HLs. *Counselling:* librarians are a key support in the preparation and publication of papers. 92.1% of libraries claim to support users in literature searches, 70.3% in journal selection and, to a lesser extent, in the standardisation of the scientific signature. This decrease could be due to the fact that clinicians are not always aware of the functions performed by the library. We therefore consider it essential to reinforce the dissemination of the service portfolios.

The dissemination of results, both of scientific production and of research results, is also the task of the scientific information expert for the promotion, visibility and positioning of their institution. However, very few libraries are part of their institution's research plan (30.7%). Reports seem to be the main tool for dissemination. However, at present, they are merely a historical record of the activity carried out. Repositories, of great relevance due to the possibilities of disseminating the activity carried out, do not reach 50% (45.4% in VHLs and 37.8% in HLs). We understand that, in many cases, the affirmative answer is due to the fact that they collaborate with the repository of their VHL. This situation would confirm that the work overload is much greater than initially appears: librarians in hospital environments are working for the repositories of the VHLs.

*Assessment and measuring of scientific activity:* the reputation and funding of an institution is partly determined by its scientific output. The fact that there is no institutional policy in this respect (two services carry out the same activity, with different policies and systems), given that librarians and documentalists are the experts in scientific publication and measuring of science, we consider 50% to be particularly low. Many respondents stated that this activity was shared by research units and/or foundations. In our opinion, having two units producing and publishing the same activity implies inappropriate duplication of efforts and lack of coordination.

Despite the support provided in institutional scientific production, only 30.7% of libraries are part of their institution's research plan, which is far below the expected figure. We believe that in order for an institution to promote research at its centre and improve its visibility, it is necessary for it to have experts in the field, i.e. library professionals.

### Conclusions

- There is non-compliance in terms of the existence of a library in many hospitals.
- Staffing is clearly insufficient, especially in the case of technicians, as many provide services in a HL and in the VHL, which leads to an overload of work.
- There is a clear relationship between the existence of technicians and the increase in publication support services. Following this line, it would be interesting to assess the relationship between the scientific production generated by hospitals and the presence or absence of libraries, but above all of specialised staff.
- Despite the importance shown, there is still little participation of libraries in the research plans of their institution.

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