

ORIGINAL ARTICLE

Use of the medical library by Family Medicine residents

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ABSTRACT

Introduction: medical libraries support the achievement of educational, research, and outreach objectives, in accordance with pedagogical and technological transformations. They must remain a cornerstone for the preparation of residents, who need to develop skills in using scientific information with methodological rigor.

objective: to determine the use made of the medical library by the Family Medicine residents of the "Adrián Sansaricq" Teaching Polyclinic in the municipality of Artemisa, during the period of July to September 2025.

Methods: an observational, descriptive, and cross-sectional study was conducted. The study population consisted of 24 residents, and the sample comprised 22. The variables analyzed were: year of residence, frequency of library visits, services provided, information sources consulted, and evaluation criteria. Data collection was carried out through a survey.

Results: the majority visited the library occasionally (45,45 %). Book and document loans were the most requested service (68,18 %). Books were the most frequently used resource (77,27 %). Half of the sample rated library services as good, and 81,82 % considered the implementation of educational strategies appropriate.

Conclusions: residents are not making optimal use of the services offered by the polyclinic library. Given these limitations, it is essential to strengthen collaborative work and institutional commitment in order to design coherent and personalized educational activities that increase the reach and actual utilization of available resources and services.

Keywords: Medical Libraries; Information Search; Family Practice; Library Services; Information Services.

INTRODUCTION

Libraries are dynamic spaces that evolve in accordance with the information needs of contemporary society. They are conceived as active, attractive, and functional environments that, in addition to preserving collections, allow interaction between users and knowledge resources, guaranteeing the appropriate conditions for learning and information management.⁽¹⁾ In the field of health sciences, this role takes on special relevance, as medical libraries (MLs) represent a fundamental support for the development of teaching, research and medical care.⁽²⁾

As an essential part of university institutions, the BMs support the achievement of educational, research and extension objectives, in accordance with the pedagogical and technological transformations driven by higher education.⁽²⁾

Likewise, its mission lies in providing efficient, timely and quality information services, aimed at meeting the needs of its academic and scientific community through relevant compilations, an adequate infrastructure and qualified personnel.⁽³⁾

Today's reality, shaped by technological advancements and new teaching models, demands that financial institutions adopt flexible organizational structures and innovative strategies to optimize their services. Information management thus becomes a creative process, supported by continuous training and the professional commitment of those responsible for it.⁽²⁾ In this context, the librarian transcends the traditional role of document custody and positions himself as an agent facilitating access to knowledge, a trainer of information skills, and a mediator in the adaptation to emerging digital environments.⁽⁴⁾ This challenge involves close collaboration between library professionals and teachers, who must build alliances that promote joint training projects and strengthen the skills needed to search for, evaluate, manage, and communicate information through various media.⁽⁵⁾

Recent scientific literature shows a growing interest in identifying strengths and weaknesses in the functioning of mobile banks, with the purpose of implementing programs that respond to the needs of their users; this is reflected in the studies carried out in Matanzas.⁽⁶⁾ and Villa Clara.⁽³⁾ On the other hand, some authors have highlighted the continuous work of library staff even in unfavorable epidemiological scenarios, such as the COVID-19 pandemic.^(2,7) These studies show that, through organized, resilient, and planned management, it is possible to maintain essential services that contribute to the professional development of healthcare personnel.

However, scientific production is still limited in relation to the analysis of the use that the health sector makes of the library services of its institutions, both in the national and foreign context.^(1,8,9) In Cuba, research focused on this topic, specifically in the field of medical residency, is scarce, despite the importance of these services in their training process.⁽¹⁰⁾

In this regard, libraries located within community polyclinics should provide hybrid services, emphasizing information literacy, user education, information and knowledge dissemination, and support for addressing health problems identified in the communities. Likewise, their integration into the Infomed network should guarantee access to the Virtual Health Library (VHL) as a key element for meeting information needs.⁽¹¹⁾ The sustainability and relevance of these services in Primary Health Care (PHC) depend, to a large extent, on the management model implemented, the preparation of the staff, and their commitment.⁽¹²⁾

Accordingly, the library of the "Adrián Sansaricq" Teaching Polyclinic has been operating since the mid-1980s, establishing itself as a key resource for the academic and scientific development of health professionals and students. However, it faces limitations related to the availability of technological resources, limited physical space, and insufficient coverage of printed materials, all of which can compromise the quality of access to information and the full realization of its potential.

Despite these shortcomings, the BM should prevail as a high-value resource for the preparation of Family Medicine (FM) residents, who need to develop skills to use scientific information with methodological rigor.

Considering the above, the present work aims to determine the use of the BM by the MF residents of the "Adrián Sansaricq" Teaching Polyclinic in the municipality of Artemisa, during the period of July to September 2025.

METHODS

An observational, descriptive, and cross-sectional study was conducted in the library of the "Adrián Sansaricq" Teaching Polyclinic, located in the municipality of Artemisa, during the period between July and September 2025. The universe consisted of 24 MF residents, of which 22 were selected through a non-probabilistic intentional sampling, based on compliance with the established selection criteria.

Inclusion criteria:

- Residents enrolled in the specialty during the research period.
- Not to be on maternity leave or on temporary leave.
- Have a smart device to apply the survey.
- Agree to participate in the study by providing informed consent.

Exclusion criteria:

- Residents who chose not to participate in the research.

The variables analyzed were:

- Year of residence: first; second; third.
- Frequency of library visits: daily; several times a week; once a week; monthly; occasionally; never.
- Services provided by the library: bibliography searches; verification of bibliographic citations; loan of books and other documents; library outreach activities (discussions, exhibitions, book presentations, events); training in the use of the services provided by the library.
- Information sources consulted: books (printed or electronic); magazines (printed or electronic); brochures; theses; compact discs; others.

Evaluation criteria were also taken into account.

The data collection was carried out through a survey designed by Rodríguez and Gutiérrez,⁽¹⁰⁾ which was applied by the author using the Google Forms tool (<https://forms.gle/yUi9ejPWy2fqD1Na8>). The collected information was recorded in a database to facilitate its statistical processing.

This study was approved by the Scientific Council and the Ethics Committee of the institution. The ethical principles outlined in the Declaration of Helsinki were observed, and all participants signed their informed consent, voluntarily collaborating in the study.

RESULTS

The composition of the sample was dominated by third-year residents of the specialty, who represented 40,91 % of the total (Table 1).

Table 1. Distribution of the sample according to the year of specialization.

Year of residence	No.	%
First	5	22,73
Second	8	36,36
Third	9	40,91
Total	22	100

Regarding the frequency with which residents visited the institutional library, it was found that the majority did so occasionally (45,45 %). None reported daily visits, and only 13,64 % indicated attending once a week (Fig. 1).

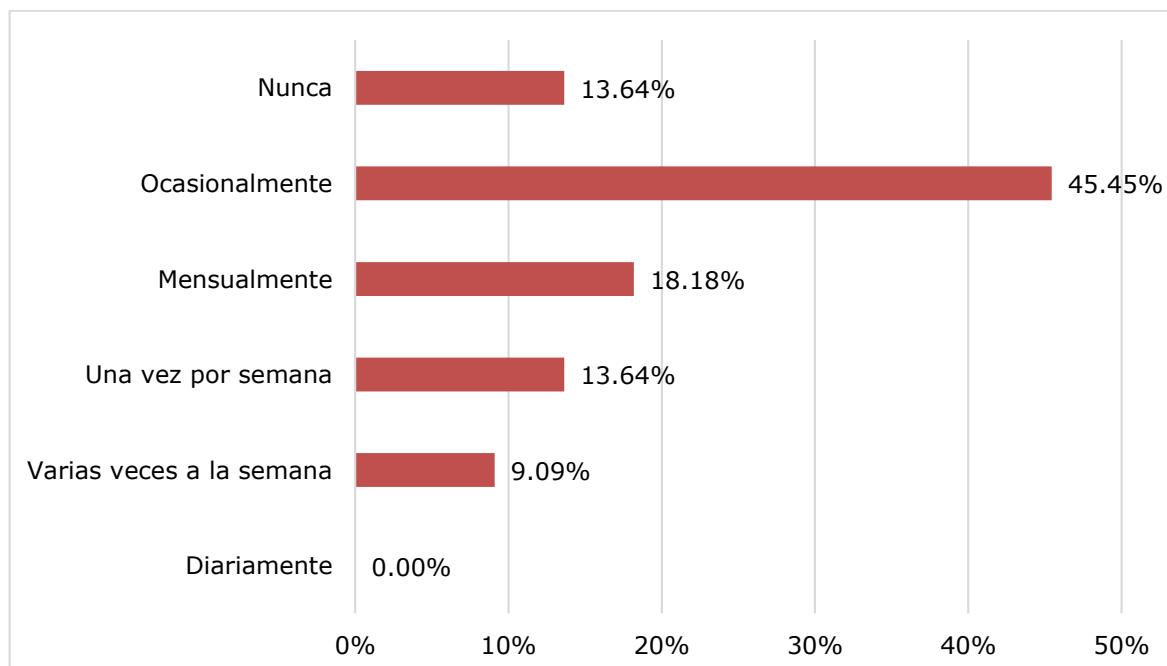


Fig. 1 Frequency of visits to the institutional library by residents.

Regarding library services used, book and document loans were the most requested (68,18 %). Senior residents made greater use of bibliographic searches (77,78 %) and citation verification (50,56 %). The other services offered were in significantly lower demand (Table 2).

Table 2. Library services used according to year of residence.

Services provided	Year of residence						Total	
	First		Second		Third			
	No.	%	No.	%	No.	%	No.	%
Library outreach	0	0	0	0	1	11,11	1	4,55
Training	0	0	0	0	1	11,11	1	4,55
Appointment verification	1	20,0	3	37,5	5	55,56	9	40,91
Bibliography search	2	40,0	4	50,0	7	77,78	13	59,09
Loan	2	40,0	7	87,5	6	66,67	15	68,18

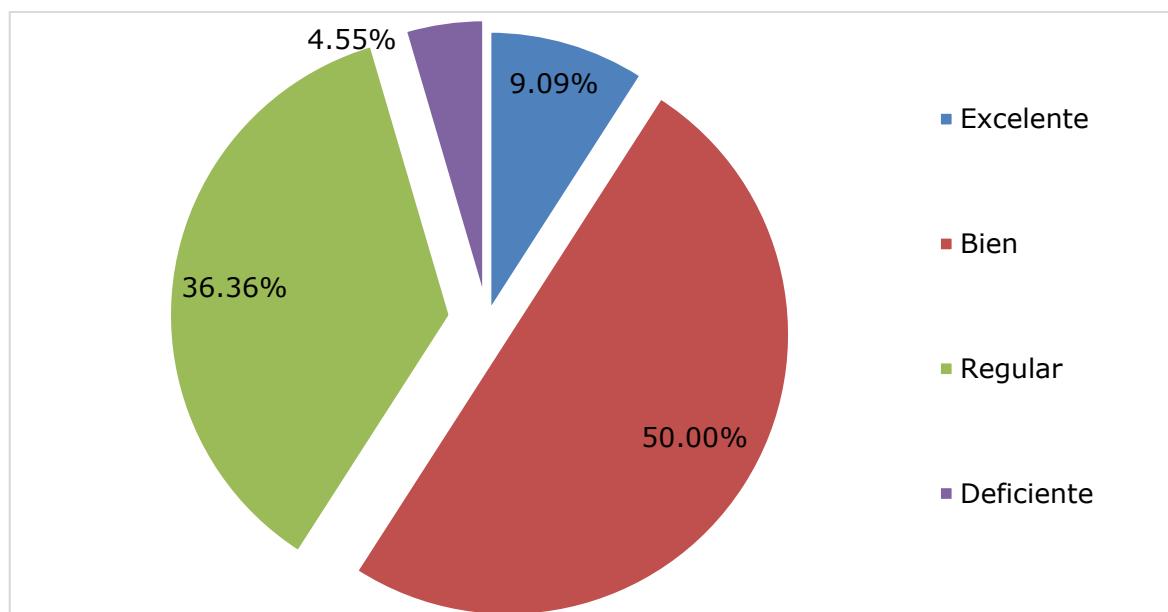
Regarding the information sources consulted (Table 3), books were the most frequently used resource by residents (77,27 %), followed by journals (54,55 %). More than half of the third-year residents (66,67 %) accessed theses. It is worth noting that CDs were not used.

Table 3. Information sources consulted according to year of residence.

Sources of information	Year of residence						Total	
	First		Second		Third			
	No.	%	No.	%	No.	%	No.	%
Books	3	60,0	7	87,5	7	77,78	17	77,27
Brochures	1	20,0	6	75,0	5	55,56	12	54,55
Magazines	2	40,0	3	37,5	5	55,56	10	45,45
Thesis	0	0	4	50,0	6	66,67	10	45,45
Others	0	0	4	50,0	1	11,11	5	22,73
Compact discs	0	0	0	0	0	0	0	0

Founta in Individual survey.

The evaluation of library services based on their contribution to the development of information skills showed that the categories good (50,00 %) and regular (36,36 %) concentrated the majority of the ratings (Fig. 2).

**Fig. 2** Evaluation of the services offered by the library.

Finally, 81,82 % of participants considered the implementation of educational strategies from the library, aimed at strengthening their information skills, to be relevant (Table 4).

Table 4. Criteria for the implementation of educational strategies from the library.

Criteria	No.	%
Yeah	18	81,82
No	2	9,09
Maybe	2	9,09
Total	22	100

DISCUSSION

To the best of our knowledge, the number of available studies directly addressing this issue in the context of medical residency is limited, making it difficult to draw precise comparisons between the findings of this research and the practices of residents regarding library use. This scarcity of background information is one of the study's main limitations.

The literature examined shows diverse results regarding the frequency of attendance at BMs, influenced by the heterogeneity of the populations studied and the research environments.

Studies conducted at the undergraduate level have shown that health sciences students prioritize the use of the internet, as well as the support of teachers and peers, to meet their information needs.⁽¹³⁾ For their part, Alcaide-Guardado et al.⁽²⁾ They documented that the epidemiological situation associated with COVID-19 led to libraries becoming essential spaces for studying and consulting teaching materials, especially among medical students. However, other authors point out that trust in librarians increases progressively throughout the training process.⁽¹⁴⁾

In this order, access to the library is also not usually among the preferred alternatives for residents.⁽⁷⁾ This is also reported by Rodríguez and Gutiérrez,⁽¹⁰⁾ in the provinces of Granma, Vargas, and Pech,⁽¹⁵⁾ In Mexico, more than half of the participants reported attending only occasionally or sometimes, a behavior similar to that found in the present study. This trend was also identified in a study conducted at a secondary care institution in Palma Soriano.⁽⁸⁾ where only 33,3 % of the professionals surveyed requested assistance from library staff in their information searches. In contrast, a study conducted in Portugal indicates that physicians and nurses were frequent users of library services.⁽¹⁾

In the author's opinion, the decline in library attendance can be attributed to a confluence of factors. On the one hand, the expansion of Information and Communication Technologies (ICTs) has transformed traditional methods of accessing knowledge, replacing guided or tutored research with self-directed learning that, nevertheless, requires guidance and training—functions in which library staff play an essential role. At the same time, technological, infrastructural, and human resource limitations in institutional libraries, coupled with insufficient promotion of their services and a lack of more engaging initiatives, could negatively impact user acquisition and retention.

The library is an environment that facilitates the development of skills and critical thinking in users.⁽¹⁶⁾ Likewise, it plays a notable role in strengthening autonomy and creativity, also consolidating itself as a fundamental resource for building professional identity.⁽¹⁷⁾

From this perspective, it is recognized that the quality of library services is a determining factor in attracting its target community. In this sense, several authors point out that among the most demanded services from library staff are the search for specialized information,⁽¹⁰⁾ as well as the use of reading rooms,^(1,2,18) and review of bibliographic references,⁽⁷⁾ results that differ from those found in the present study.

Although the research focused only on some of the services that a library should provide, considering the current conditions of the center analyzed, a general trend towards ignorance and the scarce use of vital resources is evident, such as the selective dissemination of information and user training, which can be offered in different contexts and with a wide scope.^(2,10,14,18)

It is essential that information managers strengthen their professional competencies and develop skills that optimize the quality of services, in order to meet users' information needs and promote the use of collaborative and participatory environments, conceived as spaces for knowledge exchange. Furthermore, library management must consider the community context when formulating projects related to health promotion, aligned with the institution's priority problems identified through the area's Health Situation Analysis.⁽¹²⁾

Family physicians, in particular, need to stay up-to-date in a wide variety of fields of knowledge. However, their heavy workload stemming from consultations, fieldwork, on-call shifts, and other responsibilities inherent to family medicine can significantly limit the time available for research and teaching. Likewise, libraries need to adopt more flexible hours, including outside of working hours, to ensure access for these professionals, while librarians must take a more active role by using digital tools that expand their services.

Despite the progressive incorporation of ICTs in the teaching-learning process, the results of this study show that printed sources continue to be preferred by professionals, a finding that coincides with that reported by Saraiva and Arévalo.⁽¹⁾ Although consulting the basic bibliography is an essential requirement in the specialty program, it is observed that access to updated versions available in electronic catalogs remains limited.

It is also noteworthy that only senior residents consult the specialty completion works housed in the institutional repository, when from the first year the preparation of a research project and the review of studies linked to the health problems of the polyclinic where they work are required.

Several researchers have pointed out the persistence of difficulties in managing the information resources available in the digital space, especially related to biomedical databases and virtual libraries.^(8,14,18) Hence, it is considered a priority to strengthen the use of the resources available on the Infomed portal, including the BVS, conceived as a decentralized platform that guarantees access to valid, updated and relevant information, makes visible the national scientific production and favors decision-making in any of the substantive processes of Cuban medicine.⁽¹⁹⁾

Although the author did not intend to investigate the relationship between information literacy and the use of library services, it is estimated that the implementation of educational strategies aimed at developing skills and attitudes, integrated into the curriculum of the specialty, could contribute to optimizing library services, strengthening the interaction between library staff, faculty and residents, stimulating scientific production and favoring better results in the preparation of thesis work.

Thus, a desirable graduate profile would be one in which professionals are able to independently manage scientific information, applying ethical principles and effectively communicating their results. To achieve this, it is necessary to identify areas for transformation and integrate the knowledge of the stakeholders involved, in order to enrich the pedagogical content and adapt it to the user's characteristics. Potential resources include online courses, library guides, self-study materials hosted in institutional repositories, virtual tutorials, and in-person training and information sessions.⁽⁵⁾

Furthermore, the incorporation of emerging technologies derived from Web 3.0, such as artificial intelligence, machine learning, and natural language processing, offers new possibilities for library services, through the development of chatbots and virtual assistants that improve the user experience, facilitate accessibility, enhance collaboration, and optimize information retrieval.⁽²⁰⁾

Finally, it should be noted that the small sample size may limit the generalizability of the results to other groups of family medicine residents. Similarly, the study design did not allow for establishing causal relationships between the use of library services and the participants' research skills. However, the findings offer a framework for guiding institutional decision-making to benefit the services offered by the World Library.

CONCLUSIONS

Family medicine residents are not making optimal use of the services offered at the Medical Library of the "Adrián Sansaricq" Teaching Polyclinic. Even considering the existing limitations, it is essential to strengthen collaborative work and institutional commitment and support in order to design coherent and personalized educational activities tailored to individual and collective needs, sustained over time and implemented from the beginning of the residency. In this way, it will be possible to increase the reach and actual utilization of available resources and services.

Declaration of conflict of interest

The author declares that there is no conflict of interest.

Declaration of authorship

JVG: Conceptualization, research, methodology, project management, visualization, validation, supervision, writing - review and editing.

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BIBLIOGRAPHIC REFERENCES

1. Saraiva R, Alonso-Arévalo J. La biblioteca de hospital: un estudio del centro de Portugal. Rev Cubana Inf Cienc Salud [Internet]. 2022 [citado 26/11/2025]; 33: e2039. Disponible en: <https://acimed.sld.cu/index.php/acimed/article/view/2039>
2. Alcaide-Guardado Y, Montes de Oca-Montano JL, González-Valdés M de los Á, Rodríguez-Moya M, González-Ramos M de los R. Servicios de la biblioteca de la Universidad de Ciencias Médicas de Cienfuegos en tiempo de la COVID-19. Rev Hum Med [Internet]. 2020 [citado 26/11/2025]; 20(3): 534-549. Disponible en: http://scielo.sld.cu/scielo.php?script=sci_abstract&pid=S1727-81202020000300534&lng=es
3. Aguilera-García O, Peña-Jiménez L, Pérez-Quintero M, Fernández-Pérez L. Evaluación de la gestión de calidad en la red de bibliotecas médicas de Villa Clara. Medicent Electrón [Internet]. 2023 [citado 26/11/2025]; 27(4). Disponible en: http://scielo.sld.cu/scielo.php?script=sci_abstract&pid=S1029-30432023000400016&lng=es
4. Montes de Oca-Montano JL. Competencias y desafíos del bibliotecario referencista en bibliotecas universitarias de salud: Análisis comparativo entre Cuba y México (2015-2023). BU [Internet]. 2025 [citado 26/11/2025]; 28(1): 79-86. Disponible en: <https://bibliotecauniversitaria.dqb.unam.mx/rbu/article/view/1574>
5. Heredia-Sánchez F. Innovación y alfabetización mediática e informacional (AMI) en bibliotecas: recursos, propuestas y tendencias. BAAB [Internet]. 2021 [citado 26/11/2025]; 36(121): 49-82. Disponible en: <https://dialnet.unirioja.es/servlet/articulo?codigo=8031871>

6. Escobar-Blanco L, Rivero-Llop ML, Denis-Pérez A, Moliner-Cartaya M, Fernández-Alfonso OM, Acea-Acea S. Debilidades y amenazas de las bibliotecas médicas de Matanzas, Cuba. Rev Méd Electrón [Internet]. 2025 [citado 26/11/2025]; 47: e6330. Disponible en: http://scielo.sld.cu/scielo.php?script=sci_abstract&pid=S1684-18242025000100078&lng=es

7. Pérez-Herrera MJ, Cruz-Morales N, Morgado-Bonachea I. Gestión bibliotecaria en el Centro Provincial de Información de Ciencias Médicas de Ciego de Ávila durante la COVID-19. MEDICIEGO [Internet]. 2022 [citado 26/11/2025]; 28(1): e3323. Disponible en: <https://revmediciego.sld.cu/index.php/mediciego/article/view/3323>

8. Alonso-Vazquez AV, González-García DE, Despaigne-Despaigne I, Rodríguez-Portales A, Méndez-Leyva L, Mateo-González I, et al. Competencias informacionales en los profesionales del Hospital Ginecobstétrico Docente en Palma Soriano, Cuba. EDUMECENTRO [Internet]. 2021 [citado 26/11/2025]; 13(3): 147-161. Disponible en: http://scielo.sld.cu/scielo.php?script=sci_abstract&pid=S2077-28742021000300147&lng=es

9. Damasceno-de Souza A, Almeida-Marques da Silva TAM, Soares AN. Serviço de referência de biblioteca hospitalar: uma análise das demandas de levantamento bibliográfico. Perspect ciênc inf [Internet]. 2023 [citado 26/11/2025]; 28: e38901. Disponible en: <https://www.scielo.br/j/pci/a/yNqkqPFcq9DZfKdjxFxGHqv/?lang=pt>

10. Rodríguez-Reyna R, Gutiérrez-López JI. Uso de la biblioteca médica por residentes de Medicina General Integral del municipio de Niquero. Gac Méd Espirit [Internet]. 2021 [citado 26/11/2025]; 23(2): 18-26. Disponible en: http://scielo.sld.cu/scielo.php?script=sci_abstract&pid=S1608-89212021000200018&lng=es

11. Fernández-Inerarity Y. Las bibliotecas médicas en la Atención Primaria de Salud frente a la COVID-19 en Cuba. Rev Cuba Inf En Cienc Salud [Internet]. 2021 [citado 26/11/2025]; 32(3): e1775. Disponible en: <https://www.mediographic.com/cgi-bin/new/resumen.cgi?IDARTICULO=109883>

12. González Ramos M, González-Ramos M de los RG, Alcaide-Guardado Y. Bibliotecas médicas: continuidad e importancia en la Atención Primaria de Salud. Medisur [Internet]. 2018 [citado 26/11/2025]; 16(5): 628-630. Disponible en: <https://medisur.sld.cu/index.php/medisur/article/view/4068>

13. Ramos-Bermúdez JF, Ramos-Calás M. Competencias informacionales en estudiantes de Medicina de Las Tunas. MEDISAN [Internet]. 2025 [citado 26/11/2025]; 29(0): 5063. Disponible en: <https://medisan.sld.cu/index.php/san/article/view/5063>

14. Domínguez-Aroca MI, Toro-Flores R, Gómez-González JL. Evaluación de las competencias informacionales al inicio y al final del grado en titulaciones de ciencias y ciencias de la salud de la Universidad de Alcalá y el papel de la biblioteca universitaria. An Documentación [Internet]. 2023 [citado 26/11/2025]; 26(1). Disponible en: <https://dialnet.unirioja.es/servlet/articulo?codigo=9205788>

15. Vargas-Echeverría SL, Pech-Argüelles RC. Evaluación diagnóstica de competencias informacionales en médicos residentes del Instituto Mexicano del Seguro Social. Rev Cuba Inf Cienc Salud [Internet]. 2025 [citado 26/11/2025]; 36: e2693. Disponible en: <https://acimed.sld.cu/index.php/acimed/article/view/2693>

16. Díaz-Chieng LY, Rodríguez-Torres E, Pérez-Sevila Y, Macías-Bestard C. Competencias informacionales y motivación: Referentes teóricos en la enseñanza médica superior. *Episteme Kiononía* [Internet]. 2025 [citado 26/11/2025]; 8(15): 28-44. Disponible en: http://ve.scielo.org/scielo.php?script=sci_abstract&pid=S2665-02822025000100028&lng=es

17. Alves-Santini L, da Silva-Moro EL, Brasil-Estabel L. Literacia em saúde: possibilidades de desenvolvimento a partir de ações de letramento informacional. *RBPG* [Internet]. 2021 [citado 26/11/2025]; 17(37):1-19. Disponible en: <https://rbpg.capes.gov.br/rbpg/article/view/1784>

18. Chávez-Martínez O, Moctezuma-Paz A, Sosa-Bustamante GP, González AP, Paque-Bautista C. Análisis de competencias informacionales en médicos residentes. *Rev Med Inst Mex Seguro Soc* [Internet]. 2025 [citado 26/11/2025]; 63(6): e6748. Disponible en: https://revistamedica.imss.gob.mx/index.php/revista_medica/article/view/6748

19. Morales-Fernandez T, Martínez-Ramos AT, Rivas-Corria B, Rodríguez-Bode S. Uso de la Biblioteca Virtual de Salud en las bibliotecas médicas de Villa Clara. *Medicent Electrón* [Internet]. 2024 [citado 26/11/2025]; 28(0): e4204. Disponible en: <https://medicentro.sld.cu/index.php/medicentro/article/view/4204>

20. Cruzatty-Vera JS, Verdecia-Carballo E. Las tecnologías de la Web 3.0 y su impacto en los servicios bibliotecarios. *Estud Desarro Soc Cuba Am Lat* [Internet]. 2025 [citado 26/11/2025]; 13(3): 1-16. Disponible en: <https://revistas.uh.cu/revflacso/article/view/11581>