Virtual Training on the Care of Frail Older Adults in Home Hospitalization

Javier M. Saimovici[1], María F. Grande Ratti[2], Silvana M. Scozzafava[1], Gastón Perman[3], Cinthya D. Álvarez[4], Laura E. Magallán[4], Cristian M. Gallo Acosta[1], María F. Cunha Ferré[1], Valeria P. Colombo[5] y Mónica B. Senillosa[1]

1. Sección Medicina Domiciliaria, Servicio de Clínica Médica, Hospital Italiano. Buenos Aires, Argentina
2. Área de Investigación en Medicina Interna, Servicio de Clínica Médica, Hospital Italiano. Buenos Aires, Argentina
3. Servicio de Clínica Médica, Hospital Italiano. Buenos Aires, Argentina
4. Universidad Hospital Italiano. Buenos Aires, Argentina
5. Sección Medicina Paliativa, Servicio de Clínica Médica, Hospital Italiano. Buenos Aires, Argentina

ABSTRACT

Introduction: the rise of home health care (HHC), driven by system advantages, an aging population, and patient preferences, demands specialized training. A university postgraduate course titled "Introduction to the Management of the Frail Elderly in HHC" was designed. This study analyzed student performance, demographics, and feedback.

Materials and methods: the course was virtual, asynchronous, self-paced, free of charge, aimed at healthcare professionals and hosted on the Moodle platform. It was structured into four units: Introduction to HHC systems, HHC Admission, Home assessment, and Discharge from HHC. Teaching methods included audiovisual resources, supplemental readings, and self-assessment activities. The course awarded certificates for 30 hours after the approval of the 4 self-assessment activities included throughout the training. A cross-sectional study was conducted, including students enrolled between January and August 2025. Data were gathered from educational platform analytics and voluntary feedback surveys from those who completed the course.

Results: a total of 1,250 students enrolled, and 218 completed and passed the course (17.44%), with a mean final score of 90.76/100. Participants were 73% female and 82% from Argentina, with medicine and nursing as the primary professions.There were no significant differences between those who completed the course and those who did not, in terms of gender, age, or profession. Feedback was received from 120 graduates (55% response rate). Regarding satisfaction, 99.17% felt the materials facilitated learning, 100% found the virtual campus easy to use, and 98.31% stated the course significantly aided their professional development. The highest-rated aspects were the online modality (64.60%), lecture quality (59.29%), and content (49.56%). Suggestions were received to integrate more rehabilitation topics.

Conclusion: this experience was highly valued by the students who completed the course and facilitated educational accessibility. The completion rate was low due to lack of enrollment or high initial dropout rates. The challenge lies in increasing retention in self-directed learning modalities, probably requiring enhanced faculty support if resources permit.

Keywords: home care services, frail elderly, education, medical, graduate, distance, student dropouts.

Autor para correspondencia: javier.saimovici@hospitalitaliano.org.ar, Saimovici JM.

Received: 29/01/2026| Accepted: 28/05/2026| Published: 06/23/2026

DOI: http://doi.org/10.51987/Rev.Hosp.Ital.B.Aires.v46i2.1315

How to cite: Saimovici JM, Grande Ratti MF, Scozzafava SM, Perman G, Álvarez CD, Magallán LE, Gallo Acosta CM, Cunha Ferré MF, Colombo VP, Senillosa MB. Educación virtual en el abordaje del adulto mayor frágil en internación domiciliaria. Rev Hosp Ital B.Aires. 2026;46(2):e0001315.

ISSN (en línea) 2314-3312

Educación virtual en el abordaje del adulto mayor frágil en internación domiciliaria

RESUMEN

Introducción: el auge de la internación domiciliaria (ID), impulsado por las ventajas de estos sistemas, el envejecimiento poblacional y las preferencias de los pacientes, exige una formación específica. Se diseñó un curso universitario de posgrado: "Introducción al abordaje del adulto mayor frágil en ID". Este trabajo analizó el desempeño, la demografía y la retroalimentación de los estudiantes.

Material y métodos: el curso fue virtual, asincrónico, autoadministrado, de acceso gratuito y para profesionales de la salud. Se usó la plataforma Moodle®. Se estructuró en 4 unidades: Introducción a los sistemas de ID, Admisión a ID, Evaluación en domicilio y Finalización de la ID; mediante clases que incluyeron recursos audiovisuales, lecturas complementarias y actividades de autoevaluación. El curso otorgó certificados por 30 horas tras la aprobación de las 4 actividades autoevaluatorias incluidas durante la formación. Se realizó un estudio de corte transversal que incluyó matriculados entre enero y agosto de 2025. Se utilizaron datos provenientes de la plataforma educativa y de encuestas voluntarias de retroalimentación de quienes completaron el curso.

Resultados: se matricularon 1250 estudiantes y 218 completaron y aprobaron el curso (17,44%), con un puntaje promedio final de 90,76/100. El 73% fueron mujeres, 82% de la Argentina; las principales profesiones, medicina y enfermería. No hubo diferencias significativas entre los que finalizaron o no el curso en cuanto a género, edad o profesión. Se recibió retroalimentación de 120 aprobados (tasa de respuesta 55%). El 99,17% consideró que los materiales facilitaron el aprendizaje, 100% encontró el campus virtual fácil de usar y 98,31% respondió que el curso colaboró mucho en su desarrollo profesional. Los aspectos seleccionados como los mejores fueron la modalidad *online* (64,60%), la calidad de las clases (59,29%) y los contenidos (49.56%). Hubo sugerencias de integrar más temas de rehabilitación.

Conclusión: esta experiencia fue muy valorada por los estudiantes que completaron el curso y facilitó la accesibilidad educativa. La tasa de finalización fue baja por falta de inicio o alto abandono inicial. Se plantea el desafío de aumentar la retención en las modalidades autogestionadas, probablemente mediante mayor soporte docente si los recursos lo permiten.

Palabras clave: internación domiciliaria, adulto mayor frágil, educación médica de posgrado, educación virtual, retención de instituciones de enseñanza.

INTRODUCTION

The sustained growth of the aging population worldwide, and particularly in Latin America and the Caribbean –where the proportion of people aged 65 years and older is projected to double over the next 30 years[1]– has led to an exponential increase in the prevalence of chronic diseases and frailty-related conditions among older adults[2]. This trend poses significant challenges for healthcare systems, which must identify models of care that balance quality of care, person-centered care, and cost efficiency. In this context, Home Hospitalization (HH) has emerged as a cost-effective alternative to traditional inpatient care, particularly for the management of individuals with chronic conditions and frail older adults[3-4]. Beyond serving as a substitute for hospitalization during acute episodes, HH in its long-term chronic care modality, or *home-based primary care,* enables patients to remain in their usual environment, reducing hospitalizations and emergency department visits while promoting autonomy and improving patient and family satisfaction[5]. Successful HH models for frail older adults are those that are person-centered and incorporate integrated care approaches[6]. However, to fully realize these benefits, it is essential that healthcare professionals working in this setting –including physicians, nurses, physical therapists, speech-language pathologists, and other team members– receive specific and up-to-date training in home-based care processes and in the comprehensive management of dependent frail older adults. Such training remains scarce or absent in undergraduate and postgraduate curricula across Latin America[7]. Recognizing this training gap, as well as the geographic, time-related, and financial barriers that often limit access to continuing education in Latin America[8], a university-based virtual, asynchronous, self-paced course was designed to facilitate healthcare professionals' access to training at any time from the beginning of the course until its completion, from any location, and through multiple Internet-connected devices. The course offered a learning pathway that allowed participants to progress at their own pace, fostering learner autonomy and self-directed learning[9,10] while also contributing to their digital literacy[11]. This free-of-charge course was part of a project funded by

the Inter-American Development Bank (IDB Lab) aimed at building capacity across Latin America for the care of frail older adults. Entitled *"Introduction to the Care of Frail Older Adults in Home Hospitalization,"* the course was designed for Spanish-speaking healthcare professionals involved in home-based care. The objective of this study was to present and analyze the implementation experience of this educational initiative by describing participants' academic performance, demographic characteristics, and feedback regarding the quality and usefulness of the course, as well as to reflect on this type of educational strategy and identify opportunities for improvement.

MATERIALS AND METHODS

A cross-sectional study was conducted to evaluate the outcomes of the course between January 1 and August 31, 2025. Data were obtained from information collected during enrollment, records from the course platform, and voluntary feedback surveys completed by participants who finished the course.

Course Description

The course was designed as a university-level postgraduate program delivered in a fully virtual, asynchronous, and self-paced format, with no interaction with the teaching staff and only asynchronous technical support available. The total course workload was 30 academic hours, and participants were allowed up to six months to complete the program. The university's Moodle® platform (*Modular Object-Oriented Dynamic Learning Environment*) was used. Moodle is an open-source Learning Management System (LMS) that enables the creation, management, and delivery of digital educational opportunities[12]. The course content and format were developed by an interdisciplinary team composed of healthcare professionals from the Home Medicine Section of the Internal Medicine Department, together with educators and educational technologists from the university affiliated with our healthcare organization, a high-complexity university hospital, all of whom had extensive experience in postgraduate education. Enrollment and participation were free of charge and open to Spanish-speaking healthcare professionals, including physicians, nurses, and professionals from other disciplines, through access to the university's Virtual Campus. The course objectives are presented in Table 1. The curriculum was organized into four major thematic units comprising a total of eight classes. The main contents of each thematic unit and class are presented in Table 2. A sequential curriculum was adopted which, following the introductory unit on Home Hospitalization (HH), mirrored the potential trajectory of a frail older adult from admission to discharge within an HH program.

Each class was delivered by a faculty member through a 20- to 30-minute video lecture accompanied by slides that included clinical vignettes and interactive exercises based on question-and-answer discussions of those cases. Study materials included supplementary readings prepared by the teaching team as well as bibliographic references providing full-text access to the selected resources, with preference given to materials in Spanish. Following each thematic unit, participants completed multiple-choice assessment questions, primarily based on clinical vignettes and developed according to recommended quality standards for this type of examination[13]. Feedback was provided after each question, explaining why each option was correct or incorrect.

To pass the course and obtain a certificate of completion, participants were required to pass a final examination for each thematic unit, achieving a minimum score of 70%. The course was widely promoted through the university's communication channels, the professional networks of the course directors and teaching team, as well as scientific meetings and professional societies.

Table 1. General and Specific Objectives of the Virtual Training Course on the Care of Frail Older Adults in Home Hospitalization for Healthcare Professionals

General Objectives
Self-paced course designed to promote the training of healthcare professionals in Latin America in the fundamentals of caring for frail older adults in home hospitalization, with the aim of enabling participants to apply this knowledge within their local contexts.
Specific Learning Objectives
Upon completion of the course, participants will be able to:
• Understand home hospitalization systems, their main advantages, and strategies for their implementation within an interprofessional care setting.
• Understand the processes of admission, care planning, and discharge in home-based care for both acute and chronic conditions.
• Identify the components of the comprehensive assessment of frail older adults at home and the development of a patient- and family-centered care plan.
• Understand the process of advanced care planning for frail older adults with palliative care needs
• Recognize the basic principles of caring for frail older adults during the last days of life.

Table 2. Thematic Units, Classes, and Main Contents of the Virtual Training Course on the Care of Frail Older Adults in Home Hospitalization for Healthcare Professionals.

Thematic Unit	Class	Main Contents
Introduction to Home-Based Hospital Care Systems: Why Are They So Important Today?	Introduction to Home Hospitalization Systems	General concepts and definitions of these systems. Processes for their implementation. Advantages and limitations. Standardization and integration of care.
Admission to Home Hospitalization: Who Can Be Admitted, How Does the Admission Process Work, and When and How Are Patients Discharged?	Patient Evaluation and Admission Process in Home Hospitalization	Eligibility and Exclusion Criteria for Home Hospitalization. Care Transitions Across Healthcare Settings.
Assessment of Patients with Chronic Conditions: What Should Be Evaluated and for What Purpose?	Initial Stratification of Patients Entering a Home Hospitalization System	Patient Stratification by Level of Complexity. Examples of Commonly Used Care Plans.
	Multidimensional Assessment of the Frail Older Adult at Home	Components and Clinical Utility of Multidimensional Assessment. Assessment Tools, Problem Identification, and Development of a Patient-Centered Care Plan.
	Advance Care Planning and Shared Decision-Making for Frail Older Adults Receiving Home-Based Care	Tools for Identifying Patients with Palliative Care Needs. Advance Decision-Making Process. Importance and Types of Documentation of These Decisions Within a Healthcare System.
	Developing a Shared Care Plan for Frail Older Adults in the Home Setting: Turning Person-Centered Care Planning into Reality.	Importance and Value of a Patient-Centered Care Plan. Development and Implementation Process Within a Healthcare System.
Completion of Home Hospitalization: When, How, and Why?	Completion of Home Care Following Transition to the Outpatient Setting. Patient Discharge Process.	Discharge Planning from the Time of Admission. Components of the Discharge Process and Continuity of Care.
	Completion of Home Care at the End of Life	Identification of the End-of-Life Stage. Interventions That Improve Quality of Care. Communication and Roles of the Members of the Care Team.

Study Population and Data Collection

The analysis included all healthcare professionals enrolled in the course Moodle platform between January and August 2025. Performance and enrollment data were collected, including the total number of enrolled participants and the completion rate (defined as the percentage of students who completed the course and passed the examinations for all thematic units). These data were extracted from the Moodle platform in Excel format. Demographic and professional profile information, including sex, country of origin, and profession, was obtained from the electronic enrollment forms completed through the Virtual Campus. Comparisons of dichotomous and categorical variables between participants who completed and those who did not complete the course were performed using the chi-square test. Continuous variables were compared using the Student's *t* test.

Feedback Collection Instrument

Participant feedback was obtained through a voluntary and anonymous survey made available on the

Virtual Campus upon course completion and successful certification. The survey was specifically developed for this study by the Self-Assessment and Development Unit of the University's Department of Education. The questionnaire included closed-ended Likert-scale and dichotomous questions, as well as open-ended questions designed to collect suggestions and opinions. It focused on evaluating the quality of the educational materials, the usability of the platform, the course's contribution to professional development, and the likelihood of recommending the course to other healthcare professionals. The survey instrument is presented in Table 3.

RESULTS

Of the 1,250 students enrolled between January and August 2025, 73% were women, 82% were from Argentina, and the remainder were from other South American countries. The mean age was 41.2 years. The main course outcomes are presented in Table 4. At the time of the cross-sectional assessment, 218 students had completed and passed the course, and 120 of those who passed completed the voluntary and anonymous feedback questionnaire. Among students who did not pass the course, 6.81% passed only the first of the four examinations, 5.6% passed two examinations, 1.68% passed three examinations, and none completed the fourth examination. Of the students who completed the first thematic unit, 91.76% ultimately passed the course. A flow diagram of enrolled participants is presented in Figure 1. As shown in Table 5, no significant differences were observed between participants who completed and those who did not complete the course with respect to gender, age, or profession. Among participants who passed the course, academic performance on the final examinations was high. The educational experience was highly rated in terms of both the quality of the learning resources and technological accessibility. The vast majority of respondents reported that the educational materials (lectures, bibliography, and documents on models of care) facilitated their learning, that the course contributed substantially to their professional development, that the examinations helped them learn, and that the Virtual Campus was easy to use. The likelihood of recommending the course to colleagues was very high. The most highly valued aspects of the course were the online format, the lectures, the topics and content covered, and the quizzes. Regarding responses to open-ended questions and participant comments, the most frequently mentioned themes were the importance of having access to practical and up-to-date tools for home hospitalization (HH), the relevance of the course in light of the growing expansion of HH, and the value of the course given the cross-disciplinary nature of HH

Table 3. Anonymous Questionnaire for Participants in the Virtual Training Course on the Care of Frail Older Adults in Home Hospitalization for Healthcare Professionals.

1	Did the educational materials, such as downloadable lectures, reading materials, and documents on models of care, help facilitate your learning?	Most of them did. Skip to Q. 3 Some did and some did not. Continue to Q. 2 Most of them did not. Continue to Q. 2
2	Why did some or most of the educational materials not help your learning?	(Open-ended question).
3	Did the quizzes at the end of each thematic unit help you learn?	Most of them did. Skip to Q. 5 Some did and some did not. Continue to Q. 4 Most of them did not. Continue to Q. 4
4	Why did some or most of the quizzes not help you learn?	(Open-ended question).
5	Did you find the Virtual Campus easy to use?	*Yes. Skip to Q. 7* *No. Continue to Q. 6*
6	Why was the Virtual Campus not easy to use?	Open-ended question
7	To what extent did this course contribute to your professional development?	*A great deal. Go to Q. 8* *A little. Skip to Q. 9* *Not at all. Skip to Q. 9*
8	Why did this course contribute significantly to your professional development?	Open-ended question
9	Why did this course contribute little or not at all to your professional development?	Open-ended question
10	How likely are you to recommend this course/training program to your colleagues?	Rate from 1 to 10 (1 = Not at all likely; 10 = Extremely likely).

*Q: question

Table 4. Main Results of the Virtual Training Course on the Management of Frail Older Adults Receiving Home Hospitalization for Healthcare Professionals.

Students Enrolled from January to August 2025 (n)	1250
Completion/Pass Rate	17.44% (n = 218)
Average Score on the Final Examination (out of 100)	90,76
Response Rate to the Feedback Questionnaire Among Students Who Passed the Course	55% (n = 120))
Responses to the Anonymous Feedback Questionnaire Among Participants Who Passed the Course (n = 120)	
Most of the Educational Materials Facilitated Learning	99.17%
The Virtual Campus Was Easy to Use	100%
The Quizzes Helped Participants Learn	94.96%
The Course Contributed Significantly to Professional Development.l	98.31%
Likelihood of Recommending the Course to Colleagues (0–10 Scale)	9.6
The Best Aspects of the Course Were (Select Up to Three Options):	
The Online Format	64.60%
The Quality of the Lectures	59.29%
The Topics and Content Covered	49.56%
The Learning Activities (Quizzes)	36.28%

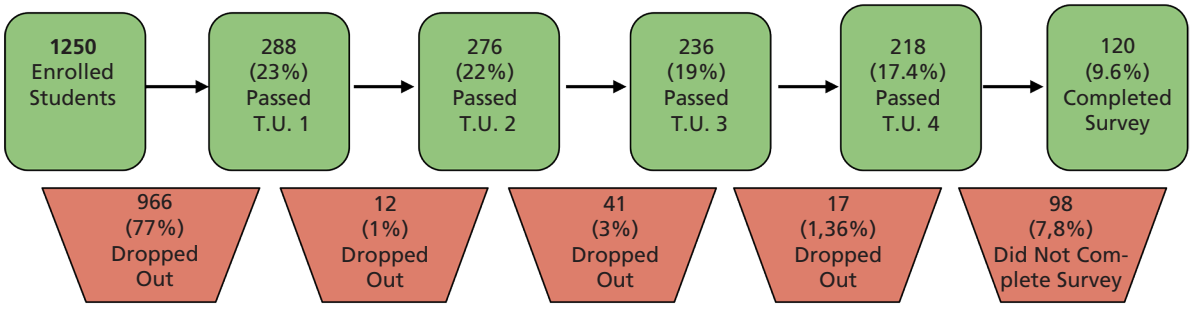

Figure 1. Flowchart of Participants Enrolled in the Virtual Course on the Care of Frail Older Adults in Home Hospitalization. T.U.: Thematic Unit

Tabe 5. Outcomes Among Participants Who Passed and Did Not Pass the Virtual Training Course on the Care of Frail Older Adults in Home Hospitalization for Healthcare Professionals (%)

Variable	Passed	Did Not Pass	p-value
Gender	M = 19.5% F = 17%	M = 80.5% F = 83%	0.314
Age (years), mean (SD	41.6 (10.79)	41.1 (10.46)	0.5
Profession (%)	Medicine = 19.26 Nursing = 17.13 Other = 16.77	Medicine = 80.74 Nursing = 82.87 Other = 83.23	0.494

M: male; F: female; SD: standard deviation

across different healthcare professions. Suggestions for improvement focused on incorporating more practical examples and clinical cases, developing a second course at an intermediate or advanced level, and increasing the integration of learning objectives related to non-medical health professions, such as speech-language pathology. Five percent of respondents suggested improving the clarity and precision of the wording of some examination questions and answer options.

DISCUSSION

During the 8-month study period, more than 200 healthcare professionals successfully completed the course. Among the students who responded to the feedback questionnaire, a very high proportion reported that the course contributed substantially to their professional development, supporting the need for this type of specialized training in the comprehensive care of frail patients receiving home-based care. The online format was the most highly valued aspect of the course, highlighting the strategic importance of this educational model for democratizing access to postgraduate knowledge by overcoming the geographic and economic barriers that affect professional training in the region, as also reflected in participants' comments. The 100% positive rating regarding the ease of use of the Virtual Campus is an encouraging indicator for large-scale, self-directed educational programs, which should strive to minimize technological barriers. The main opportunities for improvement identified through participant feedback were related to expanding the course to include a broader range of non-medical healthcare professions, particularly those involved in rehabilitation. The course completion rate was low, a common finding in self-paced online education. In a systematic review, Muljana et al. reported a completion rate of 56%, approximately 20% lower than that observed in face-to-face educational programs[14]. Friðriksdóttir[15] reported even lower completion rates for fully self-directed courses such as ours. In a virtual leadership course for nurses in Latin America, Ortega et al.[8] reported a substantially higher completion rate (75%); however, their study involved a selected group of participants who had been invited to enroll based on prior academic credentials. In contrast, our course was widely disseminated and open to any healthcare professional holding an undergraduate degree. Common factors associated with attrition in postgraduate education include excessive workload, a mismatch between the difficulty of the course and participants' expectations, profiles, or educational backgrounds, and challenges in maintaining motivation. In self-paced online programs, dropout rates tend to be further increased by the lack of instructor support[16], limited academic and technical assistance during the course, and free enrollment[14,17].

Nearly all students who completed the first thematic unit ultimately completed the course, reported very positive evaluations of the educational experience, and indicated a very high likelihood of recommending it to others. This finding suggests that non-completion occurred primarily because participants either never started the course or withdrew during the first unit. Such attrition may be attributable to one or more of the factors described above, including perceived examination difficulty (as reported by a minority of respondents who completed the course), insufficient prior knowledge, lack of motivation, or limited academic and technical support. The absence of an enrollment fee may also have contributed to the high dropout rate[17]. In addition, given the resources available, the decision to implement an instructional design without faculty support during the course and with only asynchronous technical assistance –which may have delayed the resolution of technical issues in some cases– could have contributed to the low retention rate observed. The limited instructor presence and the absence of proactive learner engagement strategies have been identified as primary causes of attrition in online learning environments[14]. A potential trade-off exists between the scale and free access of online educational programs and the retention rates achieved, with the level of faculty support emerging as a key variable influencing learner retention. This is an important consideration for teaching teams involved in the design of online educational initiatives. The fact that most enrolled participants were women may be related to the growing predominance of women among healthcare professionals in Argentina. A recent study conducted in the country's most populous province reported that women accounted for 52.8% of physicians and 81.8% of nurses[18]. The predominance of participants from Argentina may reflect a more effective local dissemination network. Our study has several limitations. First, we did not assess learning outcomes through pre- and post-course testing, as we sought to avoid introducing a potential barrier to course persistence by requiring an initial assessment. Second, we did not survey participants who failed to complete the course because of time and resource constraints. In addition, this was a descriptive study and did not evaluate educational impact, competency development, or knowledge retention. A course may generate high levels of participant satisfaction, as observed in our study, while producing limited changes in knowledge, skills, or clinical practice.

Furthermore, although the response rate was high (55%) for a voluntary feedback survey, selection bias cannot be ruled out. In this study, the survey was completed only by participants who finished the course, not by those who dropped out. This introduces an important source of bias, as less satisfied participants are more likely to withdraw before completion or decline to respond to surveys. Consequently, the findings primarily reflect the views of a self-selected group with a favorable perception of the course. Social desirability bias may also have influenced the results, as participants tend to provide positive evaluations of educational activities, particularly when the questionnaire is administered within the course platform itself or upon successful course completion. We believe that the findings of this study demonstrate that a fully self-paced, virtual, and free-of-charge educational strategy represents a valid approach for expanding access

to training opportunities in a context characterized by limited education in home hospitalization and scarce resources in developing countries. Moreover, this strategy could be replicated for similar educational programs.

One measure that could improve retention rates in this type of large-scale course, whether aimed at professionals with or without postgraduate training, would be to provide greater academic and technical support, whenever resources permit[14,16].

CONCLUSIONS

This educational initiative was highly valued by participants who completed the course and enhanced access to educational opportunities. The completion rate was low, primarily because many participants either did not begin the course or withdrew during the initial stages. Increasing retention in self-paced educational programs remains an important challenge.

Author Contributions: Conceptualization, Validation, Writing – Review & Editing: JMS, MFGR, SMS, GP, CDA, LEM, CMGA, MFCF, VPC, MBS. Data Curation, Investigation, Methodology, Resources, Software, Writing – Original Draft: JMS, MFGR, GP, MBS. Formal Analysis: JMS, MFGR, MBS. Project Administration: JMS, MBS, SMS. Supervision: JMS, MBS. Visualization: JMS.

Acknowledgments: The authors thank Drs. Jorge Copani, Esteban Gilszlak, and Mariangeles Bobillo for their contribution to the development of the course as members of the teaching team.

Conflicts of Interest: The authors declare that they have no conflicts of interest related to the content of this work.

Funding: The authors declare that this study received no funding from any external source.

REFERENCES

1. United Nations. Department of Economic and Social Affairs. World population prospects 2022: summary of results [Internet]. New York: United Nations; 2022 [citado 2026 may 17]. Disponible en: https://www.un.org/development/desa/pd/sites/www.un.org.development.desa.pd/files/wpp2022_summary_of_results.pdf.
2. Ogaz-González R, Corpeleijn E, García-Chanes RE, et al. Assessing the relationship between multimorbidity, NCD configurations, frailty phenotypes, and mortality risk in older adults. BMC Geriatr. 2024;24(1):355. https://doi.org/10.1186/s12877-024-04948-9.
3. Edgar K, Iliffe S, Doll HA, et al. Admission avoidance hospital at home. Cochrane Database Syst Rev. 20245;3(3):CD007491. https://doi.org/10.1002/14651858.CD007491.pub3.
4. Curioni C, Silva AC, Damião J, et al. The cost-effectiveness of homecare services for adults and older adults: a systematic review. Int J Environ Res Public Health. 2023;20(4):3373. https://doi.org/10.3390/ijerph20043373.
5. Zimbroff RM, Ornstein KA, Sheehan OC. Home-based primary care: A systematic review of the literature, 2010-2020. J Am Geriatr Soc. 2021;69(10):2963-2972. https://doi.org/10.1111/jgs.17365.
6. Kim CO, Jang SN. Home-based primary care for homebound older adults: literature review. Ann Geriatr Med Res. 2018;22(2):62-72. https://doi.org/10.4235/agmr.2018.22.2.62.
7. Peres F, Blanco Centurión MP, Monteiro Bastos da Silva J, et al. Mapeo de la formación en salud pública en América Latina: perspectivas para las instituciones formadoras. Rev Panam Salud Pública. 2023;47:e25. https://doi.org/10.26633/RPSP.2023.25.
8. Ortega J, Hooshmand M, Foronda C, et al. Developing nurse leaders across the Americas: evaluation of an online nursing leadership course. Rev Panam Salud Pública. 2018;42:e152. https://doi.org/10.26633/RPSP.2018.152.
9. Filipe HP, Silva ED, Stulting AA, et al. Continuing professional development: best practices. Middle East Afr J Ophthalmol. 2014;21(2):134-141. https://doi.org/10.4103/0974-9233.129760.
10. Dieser M, Sanz C, Zangara M. Metodologías para la evaluación de la autorregulación del aprendizaje en contextos educativos mediados por tecnología digital: una revisión sistemática. En: 17º Congreso de Tecnología en Educación & Educación en Tecnología (TE&ET 2022); 2022, jun 15-16; Entre Ríos, Argentina. La Plata: Red de Universidades con Carreras en Informática; 2022 [citado 2026 may 17]. Disponible en: http://sedici.unlp.edu.ar/handle/10915/139902.
11. Reyna Martínez LA, Campos Rivera M, Alpuche Miam EF, et al. Alfabetización digital en la formación médica con enfoque de atención primaria: contribución de la práctica en comunidad. LATAM Revista Latinoamericana de Ciencias Sociales y Humanidades. 2026;6(6):3071-3080. https://doi.org/10.56712/latam.v6i6.5118.
12. Gamage SH, Ayres JR, Behrend MB. A systematic review on trends in using Moodle for teaching and learning. IJ STEM Ed. 2022; 9:9. https://doi.org/10.1186/s40594-021-00323-x.
13. Galofré A, Wright AC. Índice de calidad para evaluar preguntas de opción múltiple. Rev Educ Cienc Salud. 2010;7(2):141-145.
14. Muljana PS, Luo T. Factors contributing to student retention in online learning and recommended strategies for improvement: a systematic literature review. J Inf Technol Educ Res. 2019;18:19-57. https://doi.org/10.28945/4182.
15. Friðriksdóttir, K. The impact of different modalities on student retention and overall engagement patterns in open online courses. Comput Assist Lang Learn. 2018;31(1-2):53-71. https://doi.org/10.1080/09588221.2017.1381129.
16. Shaikh UU, Asif Z. Persistence and dropout in higher online education: review and categorization of factors. Front Psychol. 2022;13:902070. https://doi.org/10.3389/fpsyg.2022.902070.
17. Xavier M, Meneses J. Dropout in online higher education: a scoping review from 2014 to 2018 [Internet]. Barcelona: ELearn Center, Universitat Oberta de Catalunya; 2020 jun [citado 2026 may 17]. Disponible en: http://doi.org/10.7238/uoc.dropout.factors.2020.
18. Martínez CK, Pereyra Duré JL, Chaz Sardi MC, et al. Caracterización de profesionales de medicina y enfermería de la provincia de Buenos Aires a partir del cruce de registros administrativos de la fuerza de trabajo. Rev Argent Salud Pública. 2024;16:e131.