Research

The PREVASC Model in Cardiovascular Prevention for the Frail Older Adult: A Person-Centred, Dignity-Driven Multidisciplinary Approach to Value-Based Care

Citation: Zaghini F, Vergari C, Mazzotta R, Morandini R, Boccanelli A, Padua D, Kopsaj V, Cortis G, Marchionni N, Carrabba N, Amico M, Selvi E, Vellone E, Scerbo F, Alvaro R. "The PREVASC Model in Cardiovascular Prevention for the Frail Older Adult: A Person-Centred, Dignity-Driven Multidisciplinary Approach to Value-Based Care" (2026) *Interdisciplinary Journal of Nursing and Health* 5(2) 118-127. DOI: https://doi.org/10.82051/ijnh-2026-330

Disciplines: Nursing, Cardiology, Medicine, Sociology

Received: February 19, 2026

Revised: April 10, 2026

Just accepted online: May 27, 2026

Published: June 11, 2026

Correspondence: Rocco Mazzotta – Department of Biomedicine and Prevention, University of Rome Tor Vergata Via Montpellier, 1 00133 Rome, Italy; Mail: rocco.mazzotta@uniroma2.it

Data Availability Statement: All relevant data are within the paper and its Supporting Information files.

Conflict of Interest: The author(s) declare(s) no conflict of interest.

Funding: This research received no external funding.

Francesco Zaghini[1], Chiara Vergari[1], Rocco Mazzotta[1], Roberta Morandini[1], Alessandro Boccanelli[2], Donatella Padua[2], Vera Kopsaj[2], Gianluca Cortis[3], Niccolò Marchionni[4], Nazario Carrabba[5], Matteo Amico[5], Eleonora Selvi[6], Ercole Vellone[1], Francesco Scerbo[1], Rosaria Alvaro[1]

[1] Department of Biomedicine and Prevention, University of Rome Tor Vergata, Rome, Italy
[2] UniCamillus – International University of Health and Medical Sciences, Rome, Italy
[3] Department of Cardiology, Anzio and Nettuno Hospitals, ASL Roma 6, Anzio, Italy
[4] Department of Experimental and Clinical Medicine, University of Florence, Florence, Italy
[5] Cardiothoracovascular Department, Careggi University Hospital, Florence, Italy
[6] Cuore Nostro Association, Rome, Italy

Abstract

Introduction. Cardiovascular diseases are the leading cause of morbidity and mortality in older adults, highlighting the need for effective preventive strategies. Structured screening programs may enhance the early detection and management of cardiovascular risk factors in this population.
To describe the impact of the PREVASC multidisciplinary model in promoting collaboration in cardiovascular prevention, collecting evidence on cardiovascular risk, and assessing gender differences in cardiovascular risk prevention among the older population.
Methods. In this descriptive correlational cross-sectional study data were collected from 1,836 participants aged 65–94 years enrolled in the PREVASC screening program. All professionals involved in the PREVASC screening campaign entered data

into a standardized data collection system. Participants underwent structured cardiovascular assessments, and adherence to pharmacological therapy, sociodemographic characteristics, and time spent at the screening center were recorded. Descriptive statistics were used to analyze frequencies, percentages, and measures of central tendency and dispersion.

Results. Among the scheduled participants, 1,640 (89.37%) attended the screening, while 196 (10.63%) did not. Adherence to pharmacological therapy was high, with 1,453 participants (90%) reporting ongoing treatment; adherence was higher among women (91.4%) than men (88.3%). The mean age of participants was 72.52 years, with a predominance of women (55.9%). The average time spent at the screening center was 1 hour and 3 minutes (range: 22 minutes–3 hours and 47 minutes), indicating an efficient organizational structure.

Discussion. The PREVASC program demonstrated high participation rates and sustainable operational performance, supporting the feasibility of structured cardiovascular screening in older adults. The integration of multiprofessional expertise and community-based preventive activities represents a replicable model for effective cardiovascular prevention and early risk identification, with potential relevance for public health planning.

Keyword: Cardiovascular Prevention, Elderly Population, Health Promotion, Multidisciplinary Team, Prevention, Screening Program

Introduction

In the contemporary public health landscape, the sustainability of healthcare systems is no longer a theoretical goal but rather an ongoing challenge that demands evidence-based decision-making, adaptive capacity, and, above all, the equitable and efficient utilization of available resources (Harris et al., 2017). Current demographic transitions, particularly population aging and the increasing prevalence of chronic diseases, necessitate the implementation of new care models that prioritize appropriateness, continuity, and personalized interventions (Hajizadeh & Connelly, 2025).

Within this epidemiological context, cardiovascular diseases (CVDs) represent the leading global public health burden, accounting for the highest rates of mortality and disability worldwide (World Health Organization [WHO], 2025; Vos et al., 2023). In Italy, over 9.6 million individuals are estimated to live with a cardiovascular condition (GBD 2023 Risk Factors Collaborators, 2024), with a substantial proportion of the disease burden concentrated among older adults (GBD 2023 Cardiovascular Disease Collaborators, 2025).

Despite their prevalence, many cardiovascular conditions remain undiagnosed and may first present as sudden cardiac death (SCD), an abrupt cessation of cardiac function in individuals who may otherwise appear healthy (Yow, Rajasurya, Ahmed & Sharma, 2024). Globally, SCD constitutes a major public health concern, responsible for more than 50% of all cardiovascular-related deaths in developed countries (Chugh & Reinier, 2019). Its incidence increases with age and the presence of established cardiovascular risk factors (Adabag et al., 2010). In Italy, over 60,000 individuals experience cardiac arrest annually (European Resuscitation Council, 2025), corresponding to an estimated incidence of approximately 1 case per 1,000 persons per year in the general population (Straus et al.,

2004). Notably, 20-25% of these events occur in apparently healthy individuals without a prior diagnosis of heart disease (Skjelbred et al., 2022). Consequently, cardiovascular screening programs not only address a critical public health need but also have the potential to save thousands of lives.

Cardiovascular diseases are also a central focus of gender medicine (Kavousi & van Lennep, 2023). Historically considered predominantly male conditions, CVDs are now recognized as the leading cause of death among women (Mosca et al., 2011). Evidence indicates that women are generally less likely to participate in health surveillance and preventive programs (Rubin, 2022), particularly in the domain of cardiovascular prevention (Gaye et al., 2022). Improving cardiovascular prevention strategies from a gender-sensitive perspective is therefore both a priority and an essential component of effective public health policy.

These considerations highlight the urgent need for public health policies and clinical research to systematically focus on primary and secondary prevention strategies that enable early risk identification and timely intervention prior to the onset of clinical symptoms.

To address this need, the PREVASC project was developed as a methodological framework for designing and testing operational standards in cardiovascular prevention, scalable within the national healthcare system. The PREVASC model rests on two interconnected pillars:

1. The development of community-based prevention programs integrating targeted screening to identify the most vulnerable populations, particularly older adults and individuals with low socioeconomic status.
2. The standardization of operational detection protocols to ensure timely and reliable identification of asymptomatic or silent cardiovascular conditions.

Following multiple pilot phases, the PREVASC project evolved into a streamlined and standardized model capable of meeting population-level cardiovascular prevention needs, subsequently implemented and made widely accessible.

The primary aim of this study was to describe the PREVASC model in facilitating institutional collaboration in cardiovascular prevention, generating robust evidence on cardiovascular risk, and assessing gender-related differences in risk prevention among the elderly population.

Methods

To achieve the main objective of this work, a descriptive correlational cross-sectional study was implemented during the implementation of PREVASC project. The organizational model adopted was based on a multidisciplinary team. Specifically, the screening campaign was conducted with the involvement of cardiology residents, nurses, nursing students and an activity coordinator, that have the role to ensure the regular conduct of activities, the quality of the data collected and patient safety. Each professional before starting the activities followed a preliminary training, aimed at the rigorous application of reception protocols, the performance of clinical activities within their scope of practice, and the standardized administration of the questionnaire. To ensure transparency and methodological rigor, we reported the data in accordance with the STROBE guidelines for cross-sectional studies (Von Elm E. Et all, 2022).

Sampling

The PREVASC Project employed a self-selected recruitment approach, contingent upon meeting three eligibility criteria: age over 65 years, being asymptomatic, and having no positive history of heart disease. The screening program had an operational duration of seven weeks.

Procedure

The operational workflow, carried out for each participant was structured into five distinct phases, designed to ensure efficiency, continuity, and a smooth screening pathway.

- *Phase I: Admission*

This phase included participant identification, collection of informed consent, and a detailed explanation of the timing and subsequent steps of the screening pathway.

- *Phase II: Nursing Assessment*

This phase was conducted through the administration of a structured questionnaire aimed at collecting essential quantitative and qualitative data for subsequent risk stratification

and analysis of the study context.

- *Phase III: Pre-screening - Electrocardiogram*

During this phase was performed an electrocardiogram (ECG) and the measurement of vital signs.

- *Phase IV: Echocardiogram*

In this phase were performed an echocardiogram together with a clinical interview, aimed at reporting findings and defining the most appropriate clinical referral and follow-up pathway.

- *Phase V: Discharge*

At the end of the previous phases, the healthcare professionals resumed care of the patient by verifying understanding the recommendations, addressing any remaining questions, and providing counselling. The pathway concluded with accompanying the participant to the exit and the formal closure of the screening experience.

Figure 1. Model of PREVASC pathway.

Instruments

During the screening campaign, were administered to the participants a questionnaire composed of validated scales available in the literature, along with a specific section dedicated to the collection of sociodemographic data.

Specifically, the questionnaire included the following sections:

- Collection of data on clinical history: A structured assessment form covering 14 body systems, with severity classified using a 5-point Likert-type scale (1 = absence of pathology; 2 = non-interfering; 3 = interfering; 4 = disabling; 5 = life-threatening)
- Collection of information on patients' functional capacity: a structured questionnaire in which patients were asked whether they were able to perform 11 predefined activities, with dichotomous (yes/no) responses
- Collection of information regarding the therapy undertaken by participants: A structured table comprising two columns—one for the drug name and one for the corresponding dosage—allowing up to 18 entries per patient

- Collection of data on social vulnerability (Abeliansky et al., 2021);
- Assessment of socioeconomic conditions (Spiers et al., 2022): Socio-economic conditions and health status were assessed using a structured questionnaire with closed-ended items, including perceived income sufficiency (4 levels), annual household income (5 categories), self-rated health (5-point scale), number of chronic conditions (4 categories), citizenship (3 categories), marital status (5 categories), educational level (3 categories), assignment to a primary care physician (2 categories), and household size (5 categories). The instrument provides a standardized collection of self-reported socio-demographic, economic, and health data for descriptive and inferential analyses.

  - Collection of data on self-care (De Maria et al., 2021): a structured questionnaire reflecting behaviors over the past month. The instrument comprises three sections:

  - **Section A – Self – Care Maintenance scale**: 7 items rated on a 5-point Likert scale (1 = never, 5 = always).

  - **Section B – Self – Care Monitoring scale**: 5 items on the frequency of self-care behaviors (1 = never, 5 = always) and 1 item on symptom recognition with three response options; for recognized symptoms, speed of recognition is rated on a 5-point scale from "not quickly" to "very quickly."

  - **Section C – Self – Care Management scale**: 5 items assessing likelihood of self-care when symptomatic (1 = not likely, 5 = very likely) and 1 item evaluating perceived effectiveness of the last remedy used (0 = did nothing, 5 = very effective).

Statistical Analysis

Data collected during the screening campaign were simultaneously entered into an Excel spreadsheet. In this preliminary analysis, the data were analyzed using descriptive statistics to assess frequencies and percentages, as well as measures of central tendency (mean, median, and mode) and dispersion (standard deviation and range).

To examine gender differences in access to the PREVASC pathway, the chi-square test was applied to variables expressed as frequencies and percentages. Conversely, for variables summarized using means, Student's t-test was performed. All statistical analyses were conducted using IBM SPSS Statistics (version 26.0; IBM Corp., Armonk, NY, USA). A p-value < 0.05 was considered statistically significant.

Ethical consideration and informed consent

The study protocol of the PREVASC project was approved by Regional Ethics Committee for Clinical Experimentation of Tuscany – Area Vasta Centro section (Ref. No. 21702_oss). Participation in the study was voluntary, and written informed consent was obtained prior to initiation of the PREVASC pathway and completion of the questionnaire. Before providing consent, all participants were fully informed about the study aims, procedures, potential risks and benefits, data confidentiality safeguards, and their right to withdraw from the study at any time without consequences. Data collected for this study were anonymized; each record was assigned a unique numeric code at the time of questionnaire completion. All data are stored in a secure, protected database in accordance with the General Data Protection Regulation (EU Regulation 2016/679—GDPR). The study was conducted in compliance with the ethical principles of the Declaration of Helsinki (World Medical Association, 2013) and in accordance with relevant European guidelines (Council for International Organizations of Medical Sciences, 2016) as well as national regulations on research ethics and data protection (Legislative Decree No. 196/2003, as amended by Legislative Decree No. 101/2018).

Results

During the observation period of the PREVASC project (data updated as of 30 December 2025), a total of 1,836 participants were scheduled. Of these, 1,640 attended the screening, while 196 did not show up, corresponding to an overall no-show rate of 10.68%. On average, more than 46 patients were scheduled per day (M = 39.04; range 14–50), of whom nearly 39 were actually examined (M = 34.89), with an absence rate of 10.68% (N = 196).

Analysis of the data on a weekly basis also showed that adherence to screening remained high and stable over time, with a participation rate of 89.37%. Specifically, each week a minimum of 152 and a maximum of 298 citizens were scheduled. Of these, those who actually participated in the screening ranged from a minimum of 142 to a maximum of 267 per week, with the number of absences ranging from 10 in the seventh week to 44 in the fifth week.

Socio-demographic characteristics

As shown in Table 1, from a demographic perspective, the enrolled population had a mean age of 72.52 years (range 65–94). Gender distribution showed a female predominance, with 902 women (55.9%) and 712 men (44.1%). Regarding smoking status, 284 participants (17.6%) reported being smokers, while 1.328 (82.4 %) were non-smokers. Educational level indicated a heterogeneous population: 290 individuals (18 %) with primary education, 674 (41.9 %) with lower secondary education, 569 (35.3 %) with an upper secondary school diploma, and 77 (4.8 %) holding a university degree.

Table 1. Characteristics of the study population.

Variables	Total Population (N = 1,614)					Male (N = 712)					Female (N = 902)				
	N	%	M	DS	Range	N	%	M	DS	Range	N	%	M	DS	Range
Age			72.5	5.8	65-94			73.0	5.6	65-93			72.2	6.0	65-94
Weight			73.6	13.6	36-140			80.3	12.5	48-140			68.3	12.0	36-120
Eight			165.2	9.0	142-192			172.3	6.9	145-192			159.7	6.1	142-180
Education															
Primary School	290	18.0				81	11.4				209	23.2			
Middle School	674	41.9				300	42.1				374	42.6			
High School	569	35.3				291	40.9				278	30.9			
Degree	77	4.8				38	5.3				39	4.3			

Within the enrolled population, 1,453 participants (90%) reported taking pharmacological therapy, whereas 161 participants (10%) were not on any treatment. Gender-specific analysis showed that 629 men (88.3%) and 824 women (91.4%) were on therapy.

Gender Difference

In this preliminary analysis, was verified the difference between gender respect the habit to smoke and the intake of therapy. How is shown in Table 2, the chi square test reveals that in the habit to smoke there isn't difference statistically significant between male and female (X2 = 0.642; p = 0.42), instead, respect the intake of therapy, it was found a statistically significant difference between male and female (X2 = 4.011; p = 0.04).

Table 2. Gender difference.

Variables	Total Population (N = 1,614)		Male (N = 712)		Female (N = 902)		X^2	p
	N	%	N	%	N	%		
Smoke								
Yes	284	17.6	119	16.8	165	18.3	0.642	0.42
No	1,328	82.4	591	83.2	737	81.7		
Therapy								
Yes	1,453	90.0	629	88.3	824	91.4	4.011	**0.04**
No	161	10.0	83	11.7	78	8.6		

With regard to the organization of the care pathway, the time participants spent within the screening center, calculated from entry to exit, showed good operational sustainability. The overall mean time was 1 hour and 3 minutes, with a minimum of 22 minutes and a maximum of 3 hours and 47 minutes.

Discussion

This study aim to evaluate the effectiveness of the PREVASC model in facilitating institutional collaboration in cardiovascular prevention, generating robust evidence on cardiovascular risk, and assessing gender-related differences in risk prevention among the elderly population.

The preliminary results of the PREVASC project are very encouraging, because was verified a high adherence to the cardiovascular screening program by the citizen. In particular the results suggest that recruitment strategies and the accessibility of the program are very efficacy. Weekly analysis showed consistent participation, with minor fluctuations likely related to external factors such as holidays or local events, indicating stable engagement over time.

The screening pathway demonstrated good operational sustainability. Participants spent a mean of just over one hour in the center, highlighting the program's capacity to manage high volumes of participants effectively even in the presence of complex clinical assessments. Timing data related to participants' pathways within the PREVASC project indicate a generally efficient operational flow, despite the presence of physiological variability linked to the intensity of the clinical assessments required.

With respect to gender differences, the PREVASC project revealed novel findings that had not been previously reported. First, the results showed a higher participation of women than men in the PREVASC project. This finding contrasts with previous research indicating that women, for various reasons, tend to take less care of their health than men, particularly with regard to cardiovascular diseases (Thompson & Daugherty, 2017), to the extent that statistics report higher mortality rates among women (Gao et al., 2019).This result may be explained by the ease of access to the PREVASC screening program. Indeed, thanks to institutional collaboration and partnerships with several organizations, the screening campaign was brought directly to citizens in shopping centers. This approach likely facilitated women's participation, allowing them to access the program during routine daily or family-related activities, without requiring additional time commitments, factors that are often cited as barriers to early disease diagnosis (Martinez-Marcos & De la Cuesta-Benjumea, 2014).

Moreover, these preliminary results showed that women were taking more pharmacological therapies than men. This may suggest a higher burden of cardiovascular disease among women, resulting in increased medication use. This finding is highly relevant for the scientific community, as it supports previous evidence showing that cardiovascular diseases are highly prevalent in the female population (Luca et al., 2022) and underscores the importance of cardiovascular prevention strategies, particularly among women.

Limitations

This study presents several limitations that should be considered when interpreting the findings. First, the cross-sectional design does not allow causal inferences regarding the relationships observed, particularly in relation to gender differences in therapy uptake and participation patterns. Longitudinal studies are needed to evaluate long-term outcomes and the sustained impact of the PREVASC model on cardiovascular risk reduction.

Second, the recruitment strategy was based on voluntary, self-selected participation, which may have introduced selection bias. Individuals more attentive to their health or already engaged in preventive behaviors may have been overrepresented, potentially limiting the generalizability of the findings to the broader older population.

Third, the study was conducted within a specific regional and organizational context, characterized by strong institutional collaboration and community-based implementation. Therefore, external validity may be limited, and caution is required when extrapolating the results to different healthcare systems or sociocultural settings.

Conclusions

The results of the PREVASC project, although still preliminary, demonstrate that structured screening programs organized through well-defined operational pathways can be implemented efficiently and sustainably in older populations, ensuring high levels of participation while maintaining the quality of the clinical pathway.

The PREVASC project represents a significant example of effective integration between academia, the healthcare system, and the local community, showing high efficiency and patient-centered managerial appropriateness. Therefore, healthcare managers should consider with interest the results achieved through the PREVASC project, as they may support the implementation of early identification programs for pathological conditions and risk factors, providing valuable evidence not only at the clinical level but also in the field of public health.

From this perspective, PREVASC represents a replicable model capable of supporting the planning of increasingly targeted, effective, and sustainable preventive interventions. Accordingly, future initiatives should aim to replicate and expand this model in order to reach progressively broader segments of the population, including individuals affected by conditions other than cardiovascular diseases.

References

- Abeliansky, A. L., Erel, D., & Strulik, H. (2021). Social vulnerability and aging of elderly people in the United States. *SSM-population health*, 16, 100924. https://doi.org/10.1016/j.ssmph.2021.100924
- Adabag, S., Luepker, R. V., Roger, V. L., & Gersh, B. J. (2010). Sudden cardiac death: epidemiology and risk factors. *Nature Reviews Cardiology*, 7(4), 216–225. https://doi.org/10.1038/nrcardio.2010.3
- Chugh, S. S., & Reinier, K. (2019). Epidemiology of sudden cardiac death: Global and regional perspectives. *Progress in Cardiovascular Diseases*, 62, 102–110. https://doi.org/10.1016/j.pcad.2019.05.008
- De Maria, M., Matarese, M., Strömberg, A., Ausili, D., Vellone, E., Jaarsma, T., Osokpo, O. H., Daus, M. M., Riegel, B., & Barbaranelli, C. (2021). Cross-cultural assessment of the Self-Care of Chronic Illness Inventory: A psychometric evaluation. *International journal of nursing studies*, 116, 103422. https://doi.org/10.1016/j.ijnurstu.2019.103422
- European Resuscitation Council. (2025). EuReCa Three: European registry of out of hospital cardiac arrest data – Italy report. *Resuscitation (dati riportati da Italian Resuscitation Council)*. https://www.quotidianosanita.it/studi-e-analisi/arresto-cardiaco fuori dall'ospedale sopravvivenza in ue in italia lo studio eureca three/
- Gao, Z., Chen, Z., Sun, A., & Deng, X. (2019). Gender differences in cardiovascular disease. *Medicine in Novel Technology and Devices*, 4, 100025. https://doi.org/10.1016/j.medntd.2019.100025
- Gaye, B., Hergault, H., Lassale, C., Ladouceur, M., Valentin, E., Vignac, M., Danchin, N., Diaw, M., Kvaskoff, M., Chamieh, S., Thomas, F., Michos, E. D., & Jouven, X. (2022). Gender gap in annual preventive care services in France. *EClinicalMedicine*, 49, 101469. https://doi.org/10.1016/j.eclinm.2022.101469
- Global Burden of Cardiovascular Diseases and Risks 2023 Collaborators (2025). Global, Regional, and National Burden of Cardiovascular Diseases and Risk Factors in 204 Countries and Territories, 1990-2023. *Journal of the American College of Cardiology*, 86(22), 2167–2243. https://doi.org/10.1016/j.jacc.2025.08.015
- Guo, J., Huang, X., Dou, L., Yan, M., Shen, T., Tang, W., & Li, J. (2022). Aging and aging-related diseases: from molecular mechanisms to interventions and treatments. *Signal transduction and targeted therapy*, 7(1), 391. https://doi.org/10.1038/s41392-022-01251-0
- Hajizadeh, M., & Connelly, L. B. (2025). Consequences of population ageing on health systems: A conceptual framework. *Global Health Research and Policy*, 10, Article 12. https://doi.org/10.4314/ejhs.v35i1.8
- Harris, C., Allen, K., Waller, C., Dyer, T., King, R., Ramsey, W., & Kelly, C. (2017). Sustainability in health care by allocating resources effectively (SHARE) 1: Introducing a series of papers reporting an investigation of disinvestment in a local healthcare setting. *BMC Health Services Research*, 17, 430. https://doi.org/10.1186/s12913-017-2388-8
- Luca, F., Abrignani, M. G., Parrini, I., Di Fusco, S. A., Giubilato, S., Rao, C. M., ... & Gulizia, M. M. (2022). Update on management of cardiovascular diseases in women. Journal of clinical medicine, 11(5), 1176. https://doi.org/10.3390/jcm11051176
- Martinez-Marcos M, De la Cuesta-Benjumea C. How women caregivers deal with their own long-term illness: a qualitative study. *J Adv Nurs*. 2014 Aug;70(8):1825-36. https://doi.org/10.1111/jan.12341
- Mosca, L., Benjamin, E. J., Berra, K., Bezanson, J. L., Dolor, R. J., Lloyd Jones, D. M., Newby, L. K., et al. (2011). Effectiveness based guidelines for the prevention of cardiovascular disease in women — 2011 update: A guideline from the American Heart Association. *Circulation*, 123(11), 1243–1262. https://doi.org/10.1161/CIR.0b013e31820faaf8
- Rubin, R. (2022). Gender gaps in preventive health care utilization: analysis of annual preventive care services in France. *eClinicalMedicine*, 51, 101546. https://doi.org/10.1016/j.eclinm.2022.101546
- Singh, S., & Bajorek, B. (2014). Defining 'elderly' in clinical practice guidelines for pharmacotherapy. *Pharmacy practice*, 12(4), 489. https://doi.org/10.4321/s1886-36552014000400007
- Skjelbred, T., Lynge, T., & Svane, J. (2022). More than half of all sudden cardiac deaths occur in persons without a history of cardiovascular disease: A study of 54,028 deaths in Denmark. *Europace*, 24(Suppl_1). https://doi.org/10.1093/europace/euac053.338
- Spiers, G. F., Liddle, J. E., Stow, D., Searle, B., Whitehead, I. O., Kingston, A., ... & Hanratty, B. (2022). Measuring older people's socioeconomic position: a scoping review of studies of self-rated health, health service and social care use. *J Epidemiol Community Health*, 76(6), 572-579. https://doi.org/10.1136/jech-2021-218265
- Straus, S. M. J. M., Bleumink, G. S., Dieleman, J. P., et al. (2004). The incidence of sudden cardiac death in the general population. *Journal of Clinical Epidemiology*, 57, 98–102. https://doi.org/10.1016/j.jclinepi.2003.08.007
- Tarasenko, Y. N., & Schoenberg, N. E. (2017). Self-perceived income sufficiency and self-reported income level among a health inequity population. *Journal of Health Care for the Poor and Underserved*, 28(2), 812-828. https://doi.org/10.1353/hpu.2017.0076
- Thompson, L. E., & Daugherty, S. L. (2017). Gender disparities in cardiovascular disease prevention. *Heart*, 103(7), 479-480. https://doi.org/10.1136/heartjnl-2016-310788

- Von Elm, E., Altman, D. G., Egger, M., Pocock, S. J., Gøtzsche, P. C., & Vandenbroucke, J. P. (2022). STROBE Statement: linee guida per descrivere gli studi osservazionali. Traduzione italiana. *Medici Oggi.*
- World Health Organization. (2025). *Cardiovascular diseases (CVDs) fact sheet*. https://www.who.int/news-room/fact-sheets/detail/cardiovascular-diseases-%28cvds%29
- Yow, A. G., Rajasurya, V., Ahmed, I., & Sharma, S. (2024). *Sudden cardiac death.* In StatPearls. StatPearls Publishing. https://www.ncbi.nlm.nih.gov/books/NBK507854/