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## Heart month: Redesigning the message



Every February, all the red from my closet appears. Anything with red hearts is ready for action and all the red dresses, shoes and accessories appear. The "Go Red for Women" begins in earnest on February 1, and we get the shortest month to increase the awareness of the leading killer of women.

This awareness campaign- initially known as The Heart Truth- began in 2003 by the National Heart, Lung and Blood Institute (NHLBI). They sought to increase the awareness of women and heart disease. It was then that the red dress became the symbol of this movement. Thereafter, the American Heart Association adopted this symbol and started the Go Red For Women initiative that is now 2 decades in the making. The American Society for Preventive Cardiology also took a stance quite early in terms of addressing women and cardiovascular disease. The initial ASPC congress, under the leadership of Dr. Seth Baum, was actually only focused on women and cardiovascular disease, with an award named after the incredible Dr. Nanette Wenger being a central part of the meeting. This award, which has continued to be awarded annually, is given to those in cardiology who have advanced the care and understanding of issues unique to women's hearts. We proudly wear our red when we are increasing awareness of heart disease in women and often place a red dress pin on our clothes and lab coats. I wear one on my lab coat every day.

Nonetheless, every single day, someone asks me about the red dress pin. This can be patients, family members, the general public, and even physicians and other members of the healthcare community. More often than not, they are unaware of this symbol. Even when they are attending a clinic in a women's heart center!

This parallels what we know about awareness of heart disease as the leading killer of women. Beginning in 1997, the first survey of heart disease awareness in women was undertaken. At that time, only 30 % of women recognized that heart disease was the leading killer of women [1]. Awareness almost doubled from 1997 to 2012, at which point 56 % of women were able to accurately identify the leading killer of women [2]. But in 2019, awareness declined to 44 %, with the greatest declines seen in Hispanic and Black women, and also in 25 to 34 year olds [3]. (Fig 1.)

During this time period, we also noted a change in mortality due to cardiovascular disease. Despite the steady decline in deaths due to cardiovascular disease seen in women since 2001, we have had a decade of lost ground and a rise in cardiovascular mortality in women, as well as in men [4]. There remains persistent gender-based inequities in primary and secondary cardiovascular disease prevention [5]. Additionally, there are persistent gaps in the inclusion of women in clinical trials, limiting applicability and understanding of effectiveness of cardiac therapies and interventions in women [5,6]. A survey performed by the

Women's Heart Alliance demonstrated that only 39 % of primary care physicians rated cardiovascular disease as their primary concern for women [7]. Additionally, only 22 % of primary care physicians and just 42 % of cardiologists felt well prepared to assess cardiovascular disease risk in women [7]. All these factors contribute to the rising mortality seen in women, but perhaps also to the lack of awareness in women about their risk of cardiovascular disease.

When the NHLBI lauched their awareness campaign regarding cardiovascular disease in women, the symbol of the Red Dress was used to unite partners the healthcare community, researchers, women's health communities, cardiovascular societies, the fashion world, major corporations, and community groups, in increasing awareness and also improving the heart health of all women. Nonetheless, the symbol of the red dress has not been easily recognizable to most of the general public. Certainly it is recognizable in the cardiology community and the search queries online for "Go Red for Women" increase every February, as has also been noted for searches related to "Breast Cancer Awareness Month" [8]. Over a 15-year time period from 2004 to 2019, the relative search volumes related to "Go Red for Women" increased particularly during the active campaign month of February by 459 %. Nonetheless, this was not nearly as much as the searches for "Breast Cancer Awareness Month", which were fourfold greater and also increased by 978 % during the active campaign months of October [8].

The question I will pose to our community is whether we need to revisit and revise our "Go Red for Women" campaign. We have lost ground in awareness of heart disease in women, and our population is increasingly more vulnerable. Is it time for a new PR agency to revise the message? How do we reach the most vulnerable women? How do we ensure the message gets to all races, ethnicities and ages? Do we need to distribute messaging in different languages to be more effective? Do we need to change the symbol? Does the "red dress' effectively send a message about heart disease or was that just Phase 1? How do we involve the greater community to strategize how we can communicate the risk for heart disease in women, in a way that will result in proactive behavior, similar to the power of the pink ribbon for breast cancer? How can we reduce the stigma of this disease in women so more women are public about their diagnosis? How do we eliminate the stigma of blame related to heart disease, which is not there for other diseases? How do we bring attention to the leading killer of women, to ensure funding for research is supported given the disproportionate numbers of lives affected by this disease?

Heart disease remains the leading killer of women, but lack of awareness remains a close second. We need to change this, in order to save the hearts of women.

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# THE RED DRESS & AWARENESS OF HEART DISEASE AS THE LEADING KILLER OF WOMEN



**Fig. 1.** Timeline Related to The Red Dress and Heart Disease Awareness in Women Timeline from 1997 to 2019 on evolution of The Red Dress movement and awareness amongst women Legend: NHLBI= National Heart, Lung and Blood Institute; AHA= American Heart Association.

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#### Declaration of competing interest

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#### References

- Robertson RM. Women and cardiovascular disease: the risks of misperception and the need for action. Circulation 2001;103:2318–20. https://doi.org/10.1161/01. cir.103.19.2318.
- [2] Mosca L, Hammond G, Mochari-Greenberger H, Towfighi A, Albert MA. American Heart Association Cardiovascular D, Stroke in W, special populations committee of the council on Clinical Cardiology CoE, Prevention CoCNCoHB. Fifteen-year trends in awareness of heart disease in women: results of a 2012 American Heart Association national survey. Circulation 2013;127(1254–1263). https://doi.org/10.1161/ CIR.ob013e318287cf2f. e1251-1229.
- [3] Cushman M, Shay CM, Howard VJ, Jimenez MC, Lewey J, McSweeney JC, Newby LK, Poudel R, Reynolds HR, Rexrode KM, et al. Ten-year differences in women's awareness related to coronary heart disease: results of the 2019 American

Heart Association National Survey: a special report from the American Heart Association. Circulation 2021;143. https://doi.org/10.1161/CIR.000000000000907. e239-e248.

- [4] Tsao CW, Aday AW, Almarzooq ZI, Anderson CAM, Arora P, Avery CL, Baker-Smith CM, Beaton AZ, Boehme AK, Buxton AE, et al. Heart disease and stroke statistics-2023 update: a report from the American Heart Association. Circulation 2023. https://doi.org/10.1161/CIR.00000000001123.
- [5] Gulati M. Saving women's hearts: improving outcomes with prevention & policy. Am J Prev Cardiol 2023;14:100504. https://doi.org/10.1016/j.ajpc.2023.100504.
- [6] Gulati M. Improving the cardiovascular health of women in the nation: moving beyond the bikini boundaries. Circulation 2017;135:495–8. https://doi.org/ 10.1161/CIRCULATIONAHA.116.025303.
- [7] Bairey Merz CN, Andersen H, Sprague E, Burns A, Keida M, Walsh MN, Greenberger P, Campbell S, Pollin I, McCullough C, et al. Knowledge, attitudes, and beliefs regarding cardiovascular disease in women: the Women's Heart Alliance. J Am Coll Cardiol 2017;70:123–32. https://doi.org/10.1016/j.jacc.2017.05.024.
- [8] Suero-Abreu GA, Barajas-Ochoa A, Perez-Peralta A, Rojas E, Berkowitz R. Assessment of the effect of the go red for women campaign on search engine queries for cardiovascular disease in women. Cardiol Res 2020;11:348–52. https://doi.org/ 10.14740/cr1107.

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