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Strengthening Foundations, Driving Progress: Women in Cardiology and Related Sciences

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Under the official publication of Women in Cardiology and Related Sciences (WINCARS) Association, Indian Journal of Cardiovascular Disease in Women (IJCDW) is leading the way in promoting women's cardiovascular health and making a significant impact both nationwide and worldwide. The journal's primary objectives encompass strengthening the women's heart health by raising awareness, enhancing access and embracing the cutting-edge innovations in healthcare. IJCDW continues to set the pace of staying current through its numerous publications which include insightful original researches, review articles, and interventional rounds covering all the recent breakthroughs in the field. IJCDW's persistent pursuit to deliver original research in the field of cardiovascular diseases in women has been rewarded by its recent indexing in SCOPUS. The voyage continues with the journal striving hard to attain further and maintain its indexing by meticulous editing, rigorous peer review, and quality publications.

The dawn of New Year has brought a fresh canvas of opportunities; not only to identify the key areas of growth and improvement but also to acknowledge the ground-breaking progress made in the last year with pride and gratitude. Here is the glimpse of impressive work published in the year 2024 which reaffirms our missionary pursuit of pushing the limits to share all the latest updates related to every facet of women's cardiovascular health through the journal.

In preventive cardiology, paper by Uppal *et al.*[1] determined an interesting and varied spectrum of oro-dental involvement in hypertensive patients ranging from minor symptomatic halitosis and dryness of mouth to severe forms such as bleeding gums, lichenoid lesions, irreversible bone loss, and periodontitis. The article emphasized the role of interdisciplinary approach in the form of frequent dental check-ups and prompt dental treatments for better regulation of blood pressure and cardiovascular state.

Another intriguing paper on hypertension (HTN), Ganji *et al.*[2] compared the salt perception threshold (SPT) and vascular stiffness in three different groups of females; pre-hypertensive, normotensive, and hypertensive. Pre-hypertensive women had far higher values for the salt detection threshold and SPT than did hypertensive women; normotensive women had much lower values. Pre-hypertensive women's mean values of brachial ankle pulse wave velocity and carotid femoral pulse wave velocity were found to be significantly higher than those of normotensives; hence, a lower salt intake in food is advisable in pre-hypertensive women to reduce the further progression to clinical HTN.

Capturing the higher cardiovascular risk (CVR) in postmenopausal women in comparison with premenopausal women, Munnangi *et al.*[3] compared the levels of estradiol and homocysteine

levels in these two different groups. Among postmenopausal women, those having coronary artery disease (CAD) were found to have higher homocysteine levels. Therefore, concluding that a simple assessment of homocysteine levels in postmenopausal women can help in better risk prediction of CAD and may guide for timely initiation of hormone replacement therapy in conjunction with other CVR factors.

Cardiometabolic and allied sciences made a niche with noteworthy articles by Goyal *et al.*[4] who did a more detailed objective analysis of association between non-alcoholic fatty liver disease (NAFLD) and CVR. Here, they used a more robust and accurate tool to determine the stage of NAFLD; vibration-controlled transient elastography derived liver stiffness measurement (LSM) and controlled attenuation parameter (CAP). In this study, severe steatosis (CAP ≥ 290) by itself failed to predict CVR, whereas severe fibrosis (LSM ≥10) was associated with higher CVR. The article, therefore, suggested that CVR reduction strategies can be aggressively prioritized in subjects with severe fibrosis, keeping the subjects with steatosis on wait, especially in countries like India where resources are limited and fatty liver problem is rising in an exponential manner.

Allied Shaik *et al.*[5] analyzed hepatic transaminases in predicting contrast-associated acute kidney injury (CA-AKI) in patients undergoing elective percutaneous coronary intervention (PCI). They concluded that aspartate aminotransferase-to-alanine aminotransferase ratio (De-Ritis ratio) >1.30 was an independent risk factor for CA-AKI.

In an endeavor to improve cardiovascular outcomes, Vanamali *et al.*[6] underlined the need of screening women with type 2 diabetes mellitus (DM) for peripheral arterial disease. In their study body mass index, duration of DM, glycosylated hemoglobin, fasting blood glucose, and post-prandial blood glucose showed significant negative correlations with ankle brachial index (ABI), whereas age, level of triglycerides, high-density lipoprotein, and low-density lipoprotein did not exhibit any statistical significant correlation with ABI.

Similar paper by Medala *et al.*[7] showed that female psoriasis patients have higher lipid levels which contribute to increased arterial stiffness and hence higher risk of cardiovascular diseases in this subset of patients.

Another innovative paper by Gara and Vanamali[8] sought an association between platelet indices in premenopausal females with metabolic syndrome. They observed that participants with diabetes, HTN and hyperlipidemia had the greatest mean platelet volume (MPV) value. Patients with glycosylated hemoglobin more than 6.5% exhibited statistically significantly higher values of platelet distribution width, MPV, and platelet–large cell ratio.

Pre-eminent work by Mohanty *et al.*[9] found that low serum ferritin or low serum iron levels, regardless of baseline hemoglobin can be used as novel markers to predict the outcomes in acute coronary syndrome (ACS) patients post 6 months. Patients with ACS, both ST-segment elevation (STEMI) and non-ST-segment elevation (NSTEMI), who had low baseline serum iron concentrations were found to have <10% improvement in the left ventricular ejection fraction (LVEF) at 6 months.

Extending research on another common, yet underdiagnosed metabolic illness-obstructive sleep apnea (OSA), Malavika *et al.*[10] came up with interesting findings. They observed a strong association between OSA and CADs where OSA has a significant effect on the severity of CAD and vice versa. Here, women with OSA were reported to have a higher risk of developing CAD than that of men with OSA.

A striking paper on genetics revealing the connection between circadian locomotor output cycles kaput (CLOCK) rs4580704 and myocardial infarction (MI) was published by Fatima *et al.*[11] For both the sexes, there was no statistically significant link between CLOCK rs4580704 and MI. However, this polymorphism was shown to be significantly linked to many of CVR variables in MI patients which included body mass index, systolic blood pressure, diastolic blood pressure, obesity, current smoking, and type 2 diabetes. Thereby, highlighting the possible impact of CLOCK rs4580 polymorphism in molding the CVR profile of MI patients.

There was a remarkable scientific output in cardiac imaging too. Beura and Singh[12] found the superiority of global longitudinal strain using speckle tracking echocardiography for estimating LVEF over two-dimensional echocardiographic Simpson's method in predicting the functional status of the patients with moderate-to-severe left ventricular systolic dysfunction (ejection fraction [EF] <40%) and found no significant gender differences.

A similar trial by Baig *et al.*[13] evaluated LV systolic function using mitral annular plane systolic excursion (MAPSE) and found an interesting finding. They concluded that EF assessment using the traditional modified Simpson's method and MAPSE demonstrated a strong correlation in patients with EF <50% and controls. However, in patients with EF >50%, MAPSE revealed subendocardial dysfunction undetected by the Simpson method, highlighting MAPSE's role in identifying subtle myocardial abnormalities.

Study on coronary interventions included an insightful paper by Kaul and Kaul[14] who observed trans-ulnar route is a safe and effective alternative to radial approach in coronary diagnostic and interventional procedures based on the principle of arterial dominance. Arterial dominance was assessed by palpation and was defined as the more intensely palpable pulse at the wrist.

Findings by Tammiraju *et al*.[15] in patients with NSTEMI ACS were also quite appealing. They reported that NSTEMI patients who underwent coronary angiogram and had a thrombolysis in myocardial infarction (TIMI) score of ≥4 had 13-fold increased likelihood of having multi-vessel CAD as compared to those with a TIMI score of <4. TIMI score of ≥4 showed a 7 times higher likelihood of producing a SYNTAX score >22.

A few initiatives carried out in environments with low resources should be especially appreciated to improve women's heart conditions. Using a color-coded classification depending on degrees of prevention, Kumar *et al*.[16] evaluated the incidence of HTN in adult women at the Urban Health Training Center of a private medical college. Of the participants, almost 39% were classed as "Specific protection," (Blue), meaning they were at risk of HTN; 14% were identified with HTN without visible problems, labeled as "Early Diagnosis/Treatment," (Yellow). While 4.3% were found as HTN patients requiring "Rehabilitation," (Red), over 21% were classified as "Disability Limitation," (Orange) due to various problems. Simplified practical technique for prioritizing the management of HTN was determined to be a color coded system of stratification.

In parallel to this, Arun *et al*.[17] also noted the impact of Behavior Change Communication using a camp based method in combination with Nukkad Natak on the self-care capacity of rural women for lifestyle adjustment for HTN prevention. Notable findings were that one in every five participants of the Rural Health Training Center had HTN and most of them (72%) were not consuming any medications. The scores of HTN diet, treatment-related knowledge, and self-care competence of the respondents showed a significant improvement after Nukkad Natak based intervention. Prevention of HTN was thus facilitated at community level by carrying out the simple maneuvers.

However, as we celebrate progress, we are also confronted with few harrowing realities – The recent brutal and horrific crime against a young lady, a bright physician from Kolkata, has sent shockwaves of outrage and grief throughout the country. This incidence serves as a poignant reminder of the disturbing realities of violence and vulnerabilities confronted to women in healthcare despite their unwavering commitment to healing and caring for others. As we mourn this tragedy, it is crucial that we transform our collective grief and resentment into a movement of positive change. Refusing to remain silent, IJCDW took a bold stance against the injustices experienced by women clinicians using its platform to amplify their voices and stood in solidarity for protecting the rights of women in the workplace.[18]

Clearly, it is apparent that IJCDW group strives to elevate the well-being of patients and providers, always being propelled by the core objective to educate the peers, facilitating the timely delivery of specialized cardiac care to majority of Indian women and thus bridging the gap between accessibility and clinical outcomes. Furthermore, it also advocates gender equity and fosters a culture of equal access and inclusivity in all domains of healthcare, research, and education. In regards to this, we extend sincere appreciation to thousands of our authors who have entrusted us with their valuable research and supported us in achieving our goals. In addition, we also treasure the work of our esteemed reviewers and editors in ensuring the highest standards of scientific quality through the stringent process of peer review followed by editorial board discernment. In an endeavor to strengthen foundations and accelerate research in the field, WINCARS, parent body of IJCDW, conducts, and Prajwalika Scholarship Scheme (PSS). Besides faculty researchers, PSS encourages undergraduates, postgraduates, and PhD students for short term funded research. Scholarship grants for the best three in the field keep the momentum and ensure the best outcomes in terms of quality research concerning the cardiovascular ailments in women. IJCDW envisions a bright journey ahead. With ever rising awareness and interest of cardiology community into sex-based differences targeting varied management approach (as indicated), sky is the limit. IJCDW foresees intermediate- and long-term research, registries and focused work in the field. With the growth of WINCARS, now encompassing women cardiologists across the nation with prominent academic and leadership roles in medical curriculum, IJCDW is sure to progress in leaps and bounds.

As we embrace the arrival of 2025, the digital platform for the WINCARS and official publication site, IJCDW, reiterates it's dedication to quality, innovation, and maximum outreach. Let's applaud to a year of unprecedented success, strategic partnerships, and distinguished recognition in the arena of women's health. Truly, IJCDW marches ahead "*Strengthening Foundations, Driving Progress*."

REFERENCES

1. Uppal B, Goyal P, Walia NK. Association of Oral Health and Periodontal Disease with Hypertension: A Cross-Sectional Study. Indian J Cardiovasc Dis Women 2024;9:206-12.
2. Ganji V, Taranikanti M, Umesh M, Kalpana M, Vamshidhar IS, John NA, *et al*. Salt Perception Threshold and Vascular Risk in Prehypertensive Women Compared to Normotensive and Hypertensive Women. Indian J Cardiovasc Dis Women 2024;9:59-65.
3. Munnangi L, Sai Baba KS, Mohammed N, Sai Satish O, Vijaya Bhaskar M, Ahmed Khan S, *et al*. Plasma Homocysteine Levels as Cardiovascular Disease Risk vis-a-vis Estrogen Levels in Pre and Postmenopausal Women. Indian J Cardiovasc Dis Women 2024;9:143-9.
4. Goyal P, Chopra R, Goyal O. Do Hepatic Fibrosis and Steatosis Measured by Hepatic Transient Elastography (FibroScan)

Predict Cardiovascular Risk in Patients with Non-alcoholic Fatty Liver Disease: An Observational Cross-sectional Study. Indian J Cardiovasc Dis Women 2024;9:66-73.
5. Shaik AS, Lakshmi VS. New Indices to Detect Acute Kidney Injury in Coronary Artery Disease Patients. Indian J Cardiovasc Dis Women 2024;9:10-4.
6. Vanamali DR, Gara HK. Peripheral Arterial Disease in Diabetes and Its Relation to Cardiovascular Risk Factors in Women. Indian J Cardiovasc Dis Women 2024;9:81-9.
7. Medala K, Taranikanti M, Umesh M, Gaur A, Vidya G, John NA Cardiovascular Risk Assessment in Women with Psoriasis. Indian J Cardiovasc Dis Women 2024;9:124-7.
8. Gara HK, Vanamali DR. Role of Platelet Indices for Cardiovascular Risk Assessment in Premenopausal Females with Metabolic Syndrome. Indian J Cardiovasc Dis Women 2024;9:90-101.
9. Mohanty NK, Dash BK, Satpathy C, Banerjee M, Routray S. Prognostic Impact of Iron Metabolism Changes in Patients with Acute Coronary Syndrome and Its Correlation with TIMI Risk Score and 6-month Left Ventricular Performance. Indian J Cardiovasc Dis Women 2024;9:195-200.
10. Malavika TP, Narayan M, Gowda BC. Association of Obstructive Sleep Apnea and Coronary Artery Diseases in Women of a Tertiary Care Hospital. Indian J Cardiovasc Dis Women 2024;9:201-5.
11. Fatima G, Parvez S, Tuomainen P, Fedacko J, Kazmi DH, Nagib Elkilany GE. Amalgamation of Circadian Clock Gene with Incidence of Myocardial Infarction. Indian J Cardiovasc Dis Women 2024;9:155-61.
12. Beura BP, Singh S. Correlation of Global Longitudinal Strain with Functional Status of Patients with Left Ventricular Systolic Dysfunction: Does Gender Difference Exist? Indian J Cardiovasc Dis Women 2024;9:213-20.
13. Baig AA, Betham R, Nathani S. Mitral Annulus Pre-Systolic Excursion (MAPSE) Versus Modified Simpson's Method for Ejection Fraction Estimation in Patients with Acute Coronary Syndrome. Indian J Cardiovasc Dis Women 2024;9:74-80.
14. Kaul N, Kaul S. Percutaneous Transulnar Arterial Approach for Coronary Interventions. Indian J Cardiovasc Dis Women 2024;9:225-9.
15. Tammiraju I, Ramisetty B, Gujjarlapudi AJ. Navigating the Risk: Unraveling the Relationship between Thrombolysis in Myocardial Infarction ("TIMI" Risk Score) and Coronary Vessel Involvement in Non-ST-Elevated acute Coronary Syndrome with Respect to "Syntax" Score - A Cross-sectional Study. Indian J Cardiovasc Dis Women 2024;9:15-21.
16. Kumar P, Kumar R, Agrawal N, Khan AA, Arun R, Singh A. Unraveling the Spectrum of Hypertension among Adult Women in an Urban Area of North India through Level of Prevention-based Color-coded Stratification. Indian J Cardiovasc Dis Women 2024;9:22-7.
17. Arun R, Kumar P, Pradhan KB, Singh A. Impact of the Use of Street Play Mode of Education on the Self-care Capacity of Village Women for Lifestyle Modification for Prevention of Hypertension. Indian J Cardiovasc Dis Women 2024;9:136-42.
18. Rao S, Chhabra S, Vipperla S, Maddury J. A Call for Justice and Systemic Change: Safeguarding Women in Medicine: Solicitation by Women in Cardiology and Related Sciences. Indian J Cardiovasc Dis Women 2024;9:121-3.

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