baseline differences in the data. Data collection and analysis were performed using SPSS for Windows (version 17.0; SPSS, Chicago, IL, USA). All the tests were two-tailed and the significance threshold was $P = 0.05$.

6.0 RESULTS

A total of 867 subjects were screened, 233 met the selection criteria, of which 66 agreed to participate in the study (Fig. 31).

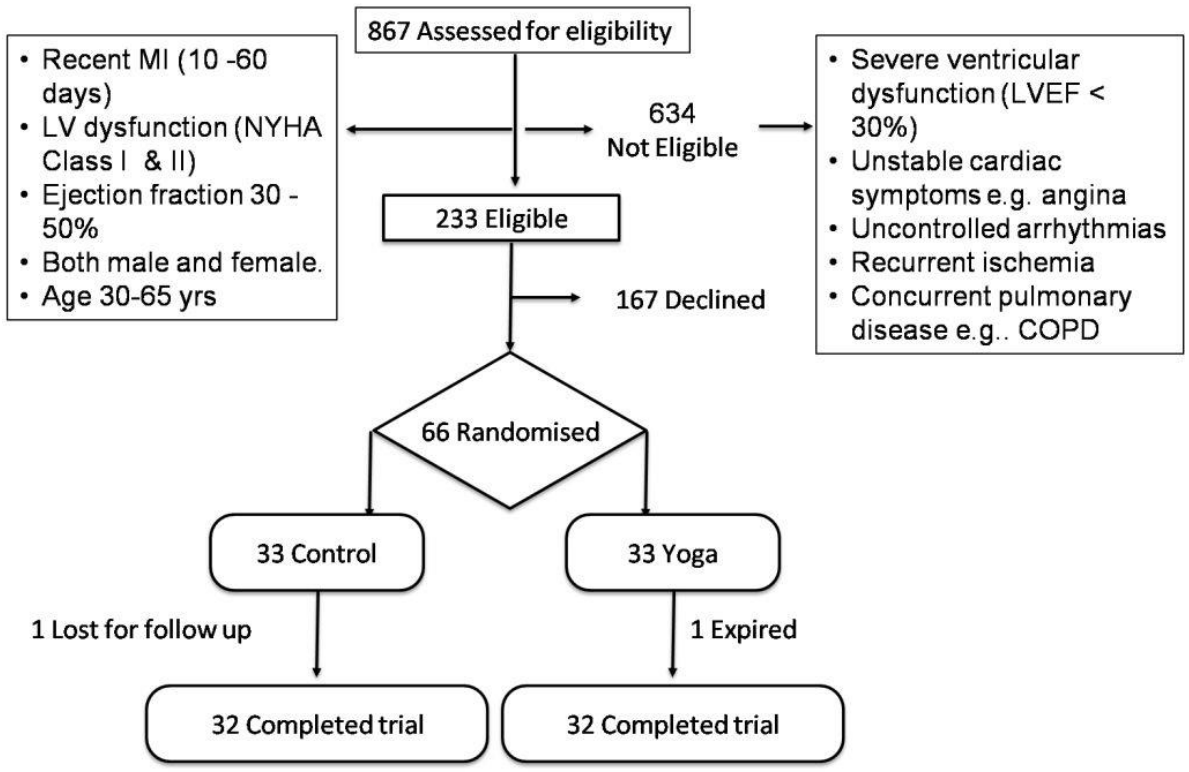

Figure 31: Flow chart illustrating study outline

Participants were 52.3 years old on average (SD = 9.9) and predominantly male (86.3%). These subjects were randomly allocated to control (n=33) and yoga (n=33) groups. Of these subjects, 32 were classified as Class II and 34 as Class I using

NYHA criteria. There was no statistical significant difference across baseline parameters between the control and yoga group for LVEF, CDS, and HAM-A (Table 9).

Characteristic	Control (n=33)	Yoga (n=33)	P value
Age	51.51±8.15	53.15±11.59	0.5098
Men	31	26	-
Women	2	7	-
Total Cholesterol (mmol/l)	166.53±58.22	165.83±44.05	0.9615
Total Cholesterol > 240mmol/l	4	1	-
Triglycerides (mmol/l)	147.15±63.20	171.83±71.91	0.2054
Triglycerides >200mmol/l	6	7	-
High density lipoprotein (mmol/l)	34.03±9.98	32.75±10.44	0.6613
High density lipoprotein <40mmol/l	21	16	-
Low density lipoprotein (mmol/l)	106.46±53.02	103.66±34.59	0.8251
Low density lipoprotein >160mmol/l	4	0	-
RBS	166.53±125.48	168.29±93.16	0.6202
Diabetics (RBS >200 mg/DL)	8	5	-
Current smokers	14	17	-
NYHA Class II	18	14	-
NYHA Class I	15	19	-

Table 9: Baseline characteristics of the study population

No significant change in the cardiac function of the patients on yoga practice.

The difference in the Left Ventricular Ejection Fraction (LVEF) levels between the two groups did not reach statistical significance (U=420.500, P value= 0.218). However, when we conducted within group analysis, we observed a marginal improvement (1.6%) in the mean LVEF levels in the yoga group (52.53+-0.832) when compared to the control group (50.9±0.859) (Fig. 32).

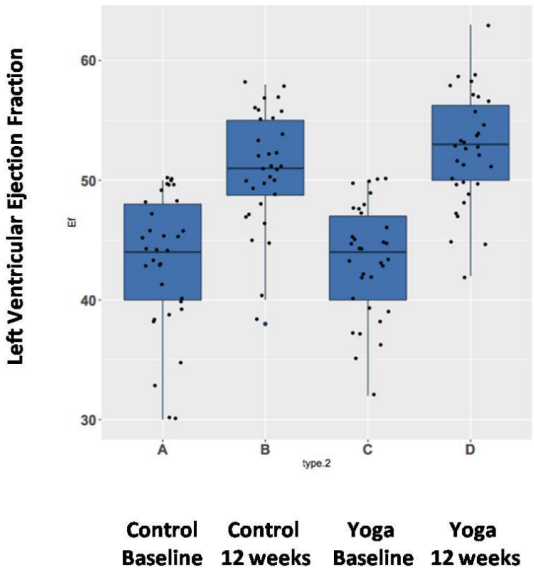

Figure 32: Box-plot illustrating small increase in LVEF in cardiac subjects in control and yoga groups, baseline and 12 week follow-up.

Significant reduction in CDS and HAM-A scores in the yoga practice group compared to control.

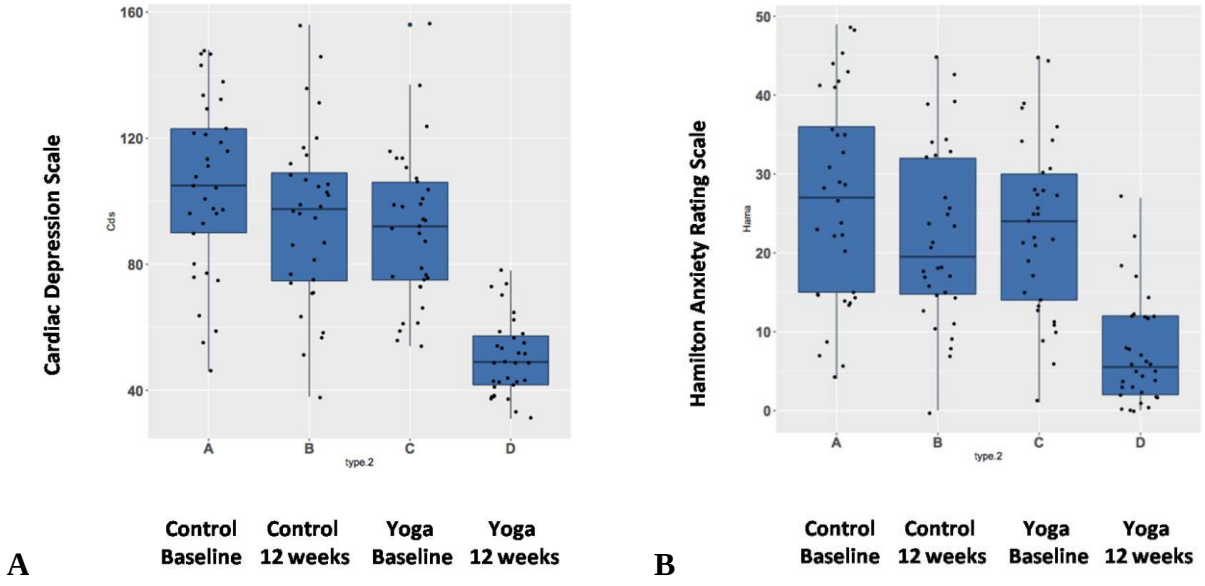

Figure 33: Box-plot illustrating significant reduction in (A) CDS and (B) HAM-A in yoga practicing group at 12 weeks compared to control.

Cardiac patients assigned to the yoga group showed statistically significant reduction in CDS (U=71, p=0.00) and HAM-A (U=128, p=0.00) compared to control patients (Fig. 33A and 33B).

Significant increase in quality of life of cardiac patients on yoga practice.

DASI estimates functional capacity in patients with heart failure and a series of points in the DASI values were used to determine cardiac functional capacity based on METs. DASI and MET scores were determined for cardiac patients undergoing yoga practice and control. We observed a significant increase in the DASI (U=146, p=0) and MET (U=136, p=0) score when cardiac patients practiced yoga along with their medications compared to controls, who were on medications only. (Fig. 34A and 34B).

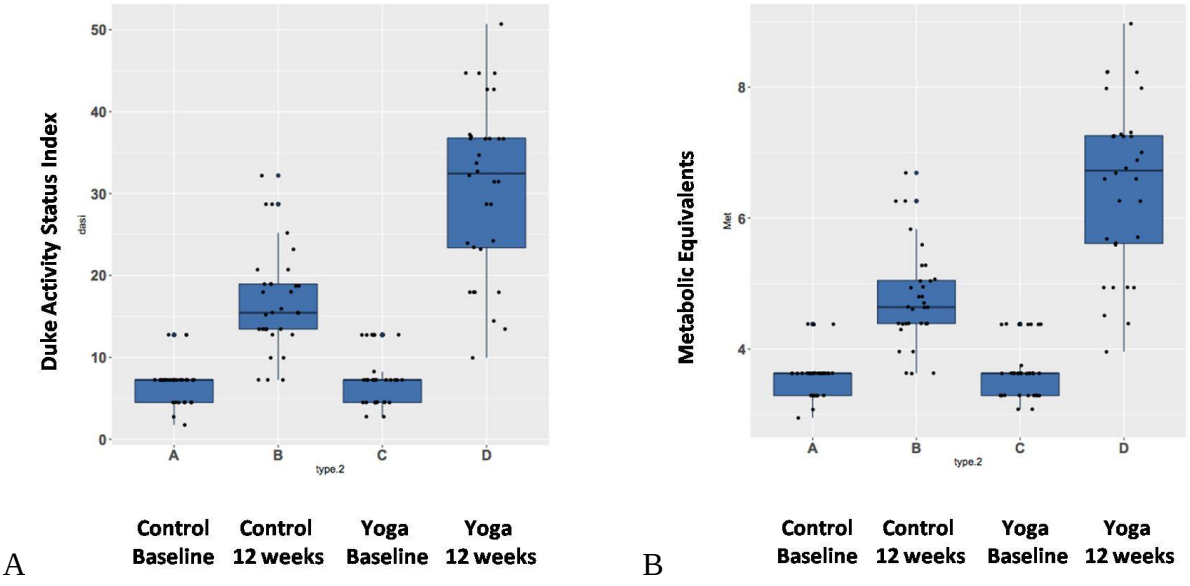

Figure 34: Box-plot illustrating a significant increase in quality of life parameters (A) DASI and (B) MET.

No significant change in biochemical outcome of cardiac patients on yoga practice.

The different biochemical lipid parameters were measured at baseline and 3 months in control and yoga groups. We observed a reduction in LDL, triglyceride, total cholesterol and HDL/total cholesterol ratio and increase in HDL in 3 months yoga practice group compared to control (Fig. 35). Although not statistically significant, there was a greater improvement in the lipid profile of patients on yoga practice compared to control. The results are summarized in Table 10.

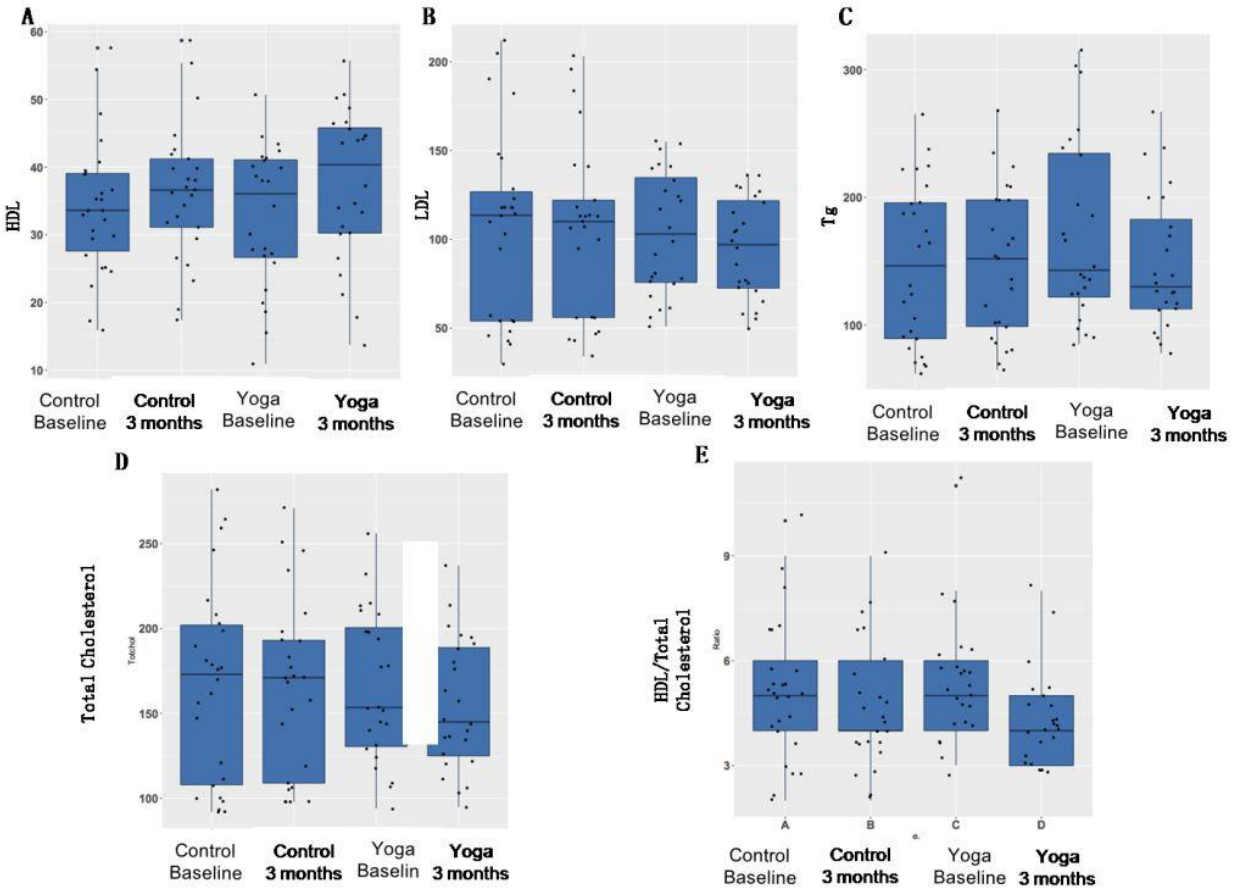

Figure 35: Box-plot illustrating (A) HDL, (B) LDL, (C) Tg, (D) Total cholesterol and (E) HDL/Total Cholesterol ratio across control band yoga at baseline and after 3 months follow up.

	Age	*Tot Chol*	*HDL*	*LDL*	*Tg*	*Ratio*	*LVEF*	*CDS*	*HAM-A*	*DASI*	*METs*
Mann-Whitney U	462.500	303.500	309.500	293.000	266.000	270.500	528.000	377.500	464.500	513.000	513.000
Wilcoxon W	1.024E+03	654.500	660.500	644.000	566.000	621.500	1.089E+03	938.500	1.026E+03	1.074E+03	1.074E+03
Z	-1.058	-0.165	-0.049	-0.369	-0.894	-0.822	-0.213	-2.142	-1.027	-0.443	-0.443
Asymp. Sig. (2-tailed)	0.290	0.869	0.961	0.712	0.371	0.411	0.832	0.032	0.305	0.658	0.658

Table 10 A. Baseline Characteristics of Participants Between Control and Yoga Subjects.

	Age	*Tot Chol*	*HDL*	*LDL*	*Tg*	*Ratio*	*LVEF*	*CDS*	*HAM-A*	*DASI*	*METs*
Mann-Whitney U	462.500	277.000	266.500	280.500	243.500	241.500	420.500	71.000	128.000	146.000	136.000
Wilcoxon W	1.024E+03	577.000	591.500	580.500	543.500	541.500	948.500	599.000	656.000	674.000	664.000
Z	-1.058	-0.460	-0.671	-0.390	-1.132	-0.989	-1.232	-5.924	-5.161	-4.922	-5.063
Asymp. Sig. (2-tailed)	0.290	0.645	0.502	0.696	0.258	0.323	0.218	0.000	0.000	0.000	0.000

Table 10 B. Three Month Follow up Characteristics of Participants Between Control and Yoga Subjects.