

LETTER TO THE EDITOR

(*J Bangladesh Coll Phys Surg 2014; 32: 55-56*)

To

Editor –in-Chief

Journal of Bangladesh College of Physicians and Surgeons.

Sir,

At first , I would like to thanks to the editor for publishing the original article ‘Non HDL Cholesterol versus LDL Cholesterol as a CVD risk factor in Diabetic Subjects’ in your journal on October, 2014 issue. I have gone through this article and found the content is very important and informative. The article deals with a facet of the lipid abnormality predominantly seen in our population and hence as cardiologists quite important to us. However, we have to draw your kind attention to some important flaws of the study.

Firstly , the study¹ was evaluating non-HDL cholesterol versus LDL cholesterol as a CVD risk factor in confirmed diabetic subjects. The study design should have been a prospective/cohort study, not a cross sectional observational one.² Only then with long term follow up, you can identify those who developed CVD events and compare them with those who didn’t. And then taking their different lipid parameters, you can find out the incremental risk of a particular pattern or ratio of lipids regarding CVD risk.

How the authors classified CVD risk individuals in this study¹ were not at all described in this article. Risk calculation is only possible from a case-control study or from a prospective one from OR or RR respectively.²

Secondly, even in diabetic individuals, the confounding variable ‘sex’ has to be taken into account. As Tohidi M et al³ have shown that in diabetic men, TC, LDL-C, non-HDL-C and TC/HDL-C are independent predictor of incident CVD while in diabetic women, after adjustment for CVD risk factors, only TC/HDL-C ratio resulted in a significant risk for CVD. In the present study, the calculation was not done separately.

Finally, we thank the authors for drawing our attention to the fact that it is not the absolute value of lipids that

is important but the proportions of different lipids which are much more important.

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Author Reply

To

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Sir,

We thank Prof. Abdul Wadud Chowdhury and Dr. Mohammad Abaye Deen Saleh for their valuable comments on the original article.¹ We agree that the ideal study design should be prospective/retrospective/cohort where CVD events can be compared to evaluate the relative contribution of non-high-density lipoprotein (non-HDL) cholesterol and low-density lipoprotein (LDL) cholesterol. But cross-sectional study can also provide some information regarding this.¹ The present study¹ did not compare CVD events, rather two important and established CVD risk factors (LDL cholesterol and non-HDL cholesterol) were compared to include or exclude high risk subjects. In this study¹,

LDL cholesterol up to 100 mg/dL was considered as no/low risk for CVD and LDL cholesterol >100 mg/dL was considered as high risk for CVD, and non-HDL cholesterol up to 130 mg/dL was considered as no/low risk for CVD and non-HDL cholesterol >130 mg/dL was considered as high risk for cardiovascular diseases (CVDs). Numbers of subjects at low or high risk classified by non-HDL cholesterol and LDL cholesterol cut-off values described above and mentioned in the article¹ were compared by Fisher's exact test in each group. Sex could have been considered during analysis. But in the background information², regarding recommendations of cut-off values of LDL-C and non-HDL-C, sex differentiation was not addressed. Moreover, in methods of this article no category was made based on sex. Here, this cross-sectional observational study¹ aimed to focus on when non-HDL cholesterol or LDL cholesterol is to be the target of CVD risk reduction regarding triglyceride (TG) levels. We concluded that for the detection of high-risk individuals in terms of non-HDL cholesterol above 130 mg/dL and LDL cholesterol 100 mg/dL, LDL cholesterol is a better tool than non-HDL cholesterol at TG concentration up to 150 mg/dL and non-HDL cholesterol is better than LDL cholesterol at TG concentration above 200 mg/dL.

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