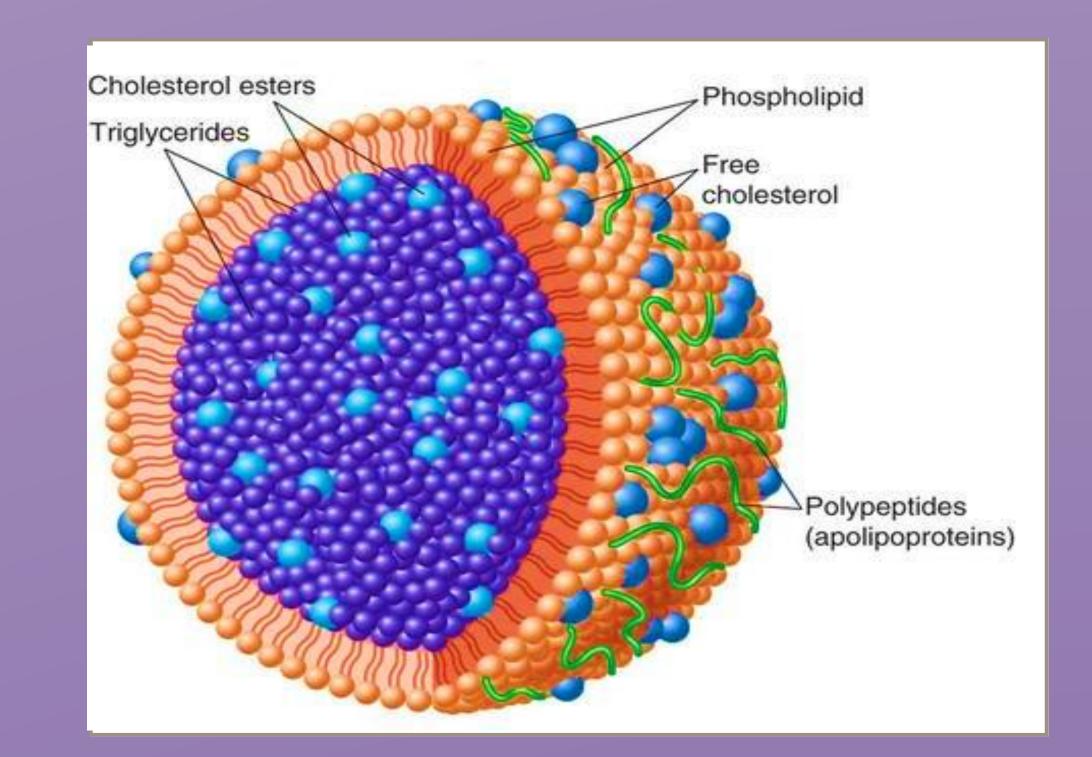
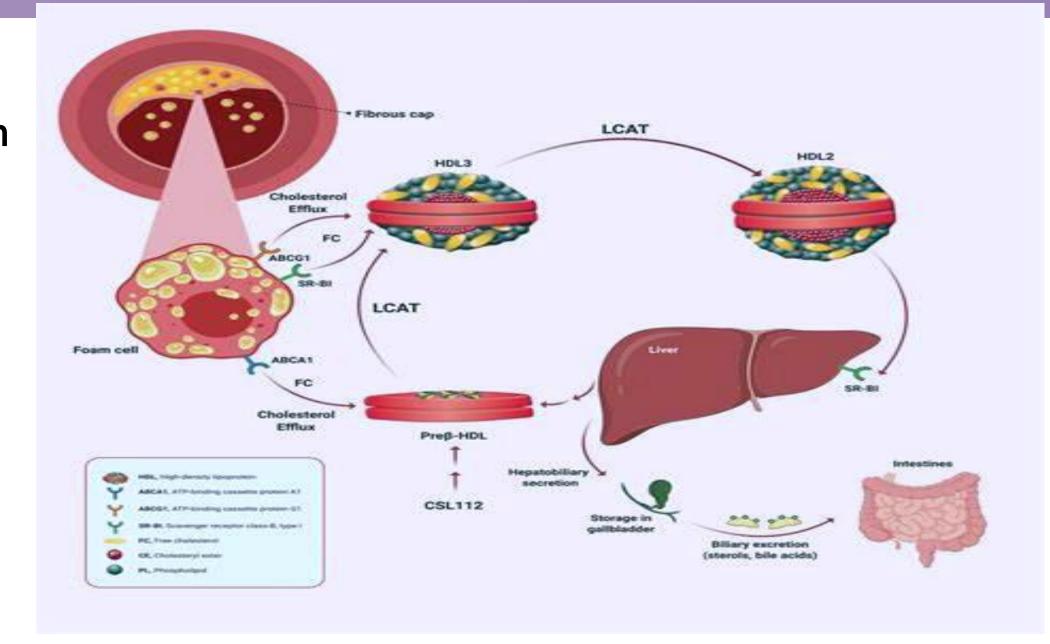
Lab Report Based Learning of dyslipidemia in a peer assisted small group discussion in biochemistry: An effective way of emphasizing Early Clinical Exposure for first phase MBBS students

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Introduction



Collaborative learning where medical students interact with their peers and facilitators rather than just acquiring knowledge through one way transfer of information from teacher to students, has number of advantages shown in various studies.

In this study we have proposed a newer way of teaching the topic of "dyslipidemia" to first MBBS student where actual patients reports of various types of dyslipidemia were given to students to identify the type of dyslipidemia along with it's underlying metabolic defect and molecular aspects. We named this approach as Lab Report Based Learning [LRBL].

Aims & Objective

Aim of the study was to find out the difference in learning behavior of the students, when a metabolic pathway is taught in a clinically integrated manner where patients actual blood test reports. With this aim in mind the objective framed was

- 1) To teach the topic of dyslipidemia with the help of actual patient blood report
- 2) Find out the perception of learners with this newer technique of teaching

Methodology

The class is being traditionally divided into two batches; batch A (n = 63), and batch B (n = 62). On the day of the LRBL, each batch was further subdivided into five subgroups, each subgroup was given one type of dyslipidemia report to discuss. The survey instrument was developed using a five-point Likert scale.

Methodology Cont....

The normally distributed continuous variables are presented in the form of mean and standard deviation. In addition to the quantitative data obtained using the Likert survey instrument, qualitative data were also generated from free-text written responses.

Result

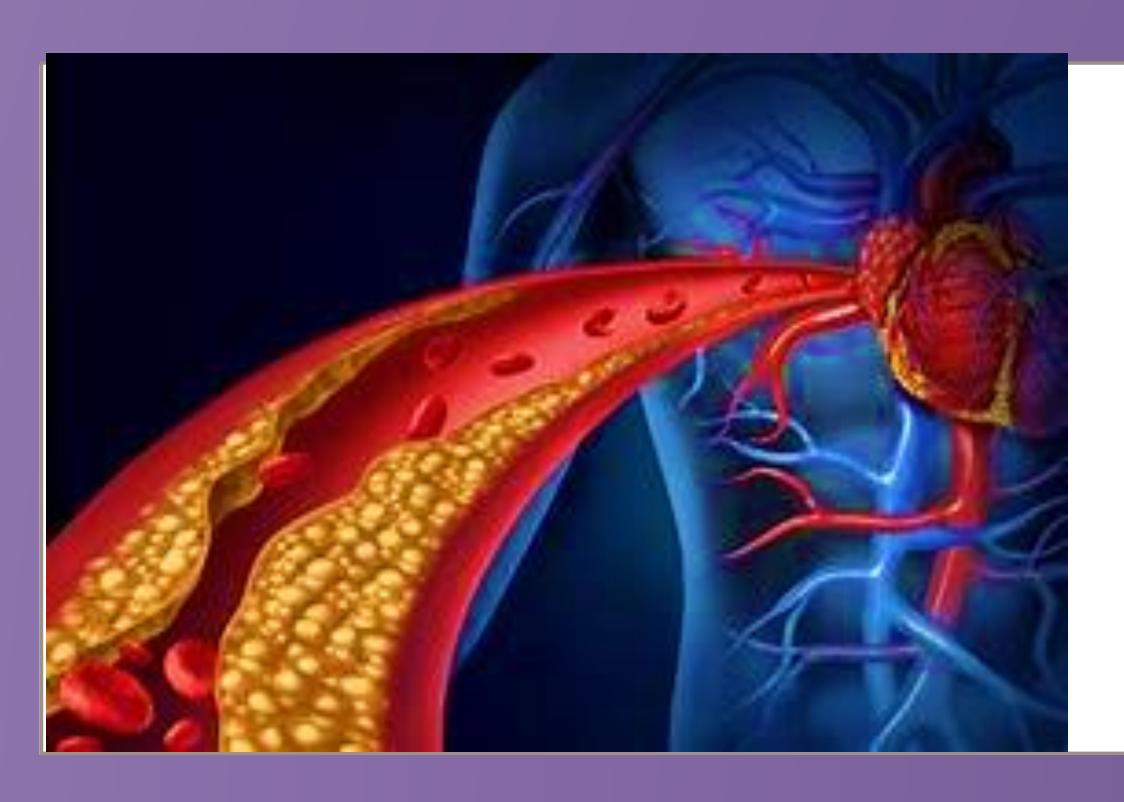
One hundred and three feedback forms were collected and reviewed. The perceptions of learners on various aspects of LRBL (on a 5-point Likert scale) were analysed Students had a strong agreement that the LRBL is a more interesting way to learn the topic of lipoprotein metabolism and dyslipidemia (63.1%); makes the concepts clearer

(46.6%); boosts confidence in interpreting lipid profile reports of patients (40.8%); infuses enthusiasm and motivation to learn the topic further in greater depth (53.4%) and enables better clinical correlation of lipoprotein metabolism (47.6%).

The total median score for the five opinion questions was 22 (maximum possible score 25). The mean and median score for each of the questionnaire items is presented in Table 2.

In addition, thematic analysis of written free text revealed that the students found the LRBL activity to be more interactive, beneficial and student-friendly than a traditional didactic lecture. They also felt that it made the topic more relatable in clinical context. Further, respondent found that LRBL activity promoted recall, re-enforcement and application of previously acquired knowledge as well as enabled long term retention of the topic learned.

The students suggested that more such LRBL activities with actual clinical case reports may be planned in future also covering other topics of the subject as well.



Conclusion

In our opinion, such kind of LRBL should be included in routine teaching schedule at regular interval not only in subject of biochemistry, but also in various other subjects of diagnostic departments like pathology and microbiology to enhance learner's understanding of various concepts taught in didactic lecture and more importantly helping them to solve clinical challenges in day to day encounter of patients. Activities like these, where we teach medical students with real patient reports not only boost their confidence as a future clinician, it also makes them understand the relevance of preclinical and paraclinical subjects in approaching patient care.

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