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以病例为基础的讨论式教学模式在临床教学中的应用*

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摘要 目的:探讨以病例为基础讨论式学习(case-based discussion and learning,CBDL)在临床教学中的应用效果。**方法:**将 40 位临床医学本科专业学生随机分为两组,其中 20 人采用 CBDL 教学,20 人采用传统教学,并且通过理论基础考试和临床技能考试的形式评价学生的学习效果,通过问卷的形式调查学生对教学方法的满意度。**结果:**CBDL 教学组的理论考试、临床技能考试及总成绩得分均较传统教学组明显提高($P<0.01$),CBDL 教学组学生对教学的满意度分别为:教学方法 100%,教学效果 90%,小组功能 95%,教师评价 95%。**结论:**CBDL 教学法较传统教学方法更能提高学生的基础和临床能力,为临床工作中独立解决问题打下了基础。

关键词:CBDL; 内科; 临床教学

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Application of Case Based Discussion and Learning (CBDL) on the Teaching of Clinical Medicine*

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ABSTRACT Objective: To explore the application of case based discussion and learning on the teaching of internal medicine. **Methods:** 40 students were selected and randomly divided into two groups with 20 students in each one. The students in the CBDL teaching group (20 students) were taught by the case based discussion and learning, while the students in the traditional teaching group (20 students) received the conventional teaching method. Then the satisfaction of teaching method was tested by theoretical and skill examination, and a questionnaire survey about teaching was conducted. **Results:** The theoretical score, clinical skill score and total score of CBDL group were higher than that of traditional group ($P<0.01$). Student satisfaction in CBDL teaching were as follows: teaching methods 100%, teaching effect 90%, function of group 95%, and teacher evaluation 95%. **Conclusion:** CBDL teaching method is superior to the traditional teaching method which could lay the foundation of solving problems independently for clinical work in the future.

Key words: CBDL; Internal medicine; Clinical education

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前言

以病例为基础的讨论式学习法(case-based discussion and learning,CBDL)是指教师在课堂上采用病例为学生提供模拟临床环境,通过小组讨论式教学,帮助学生尽早形成临床思维。该教学模式以典型的病例讨论为内容,通过任务来诱导,加强和维持学生的学习动机,充分调动学生的学习积极性和主动性,培养学生的自我学习能力和创新能力^[1,2]。我教研室在临床教学中采用了以病例为基础讨论式学习的教学法,取得了显著的教学效果。

1 资料与方法

1.1 研究样本

在我院实习的临床医学本科专业学生,共 40 人,随机分为 2 组,在老年医学课程教学中 20 人采用 CBDL 教学,平均年龄(18.91 ± 2.39)岁。对 20 人采用传统教学,平均年龄($19.11\pm$

2.19)岁。两组间性别、年龄、分组前考试成绩差异无统计学意义,具有可比性。

1.2 研究方法

1.2.1 CBDL 教学组 采用 CBDL 教学模式,具体分以下四个步骤。①选择病例:病房患者或标准化病人,要求病例资料齐全,诊断明确的患者,制作成多媒体形式。②安排任务,学生自由分组;教师可以先对病例进行简短介绍,然后提出问题,安排任务,启发解决问题的思路。20 位同学分为 4 个小组,每个小组 5 人。③小组讨论并汇报:各学生小组对问诊和体检所获资料进行分析和讨论,先确定患者的主诉、现病史、既往史、个人史,完善体格检查,然后是需要哪些辅助检查,最后列出疾病诊断、鉴别诊断、诊断依据、治疗方法和预后。每个小组内进行讨论,查阅资料及检索文献,找出解决问题的关键点,提出解决问题的方案,各抒己见、集思广益,每组选派一名同学进行汇报,其他同学补充报告。④教师总结点评:根据学生的讨论情况,有针对性地给予指导,鼓励学生创新能力的培养,最后进行总结

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归纳和补充完善。

1.2.2 传统教学组 使用多媒体课件教学主题的课堂教学。

1.2.3 教学效果评价 教学效果评价分为理论考试和临床技能考核两部分内容,在教学结束后进行,理论考试为基本理论知识题和病例分析题两部分,重点考查学生的基础知识、医学知识的综合应用、诊断和鉴别诊断能力及临床思维过程等。临床技能考核包括内科学基本操作、影像学考核、心电图考核、医德医风及心肺复苏操作。理论考核和临床技能考核均为 100 分。

1.2.4 教学满意度评价 采用问卷的形式对 CBDL 教学授课后进行调查,采取调查问卷的形式进行评价,问卷分为教学方法、教学效果、小组功能和教师评价 4 个部分。

1.3 统计学方法

数据分析采用 SPSS 19.0 统计软件包,计量资料采用两独立样本 t 检验。P 值取双向,P<0.05 认为差异有统计学意义,P<0.01 认为差异有显著统计学意义。

2 结果

2.1 两组教学方法考试成绩的比较

对两组学生分别进行 CBDL 教学和传统教学,教学之后进行理论考试和临床技能考试,CBL 教学组的理论考试成绩(95.12 ± 7.13 vs 86.06 ± 8.11)和临床技能考试成绩(94.89 ± 8.13 vs 82.07 ± 7.72)均较对照组(传统教学组)明显提高,总成绩得分 CBDL 教学组较对照组也明显提高(95.00 ± 8.02 vs 84.07 ± 8.01),见表 1。

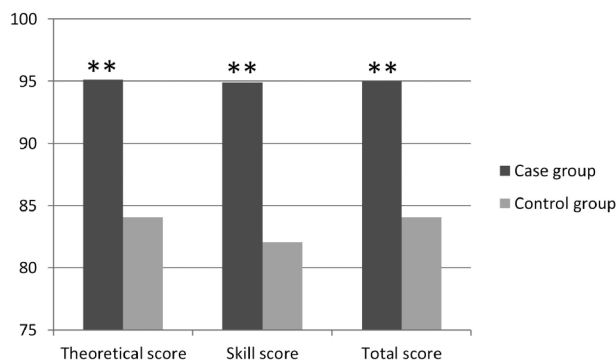


图 1 两组间考试成绩的比较

Fig. 1 The comparison of examination performance of the two groups

Note: ** P<0.01 compared with control group

2.2 学生对 CBDL 教学的满意度

对 CBDL 教学组的学生进行问卷调查发现,学生们对 CBDL 教学方法的满意率为 100%,对教学效果的满意率为 90%,对小组功能的满意率为 95%,对教师评价的满意率为 95%,见表 1。

表 1 学生对 CBDL 教学的满意度

Table 1 Satisfaction of CBDL Teaching

Item	The number of satisfied students	The percent of satisfied students
Teaching methods	20	100%
Teaching effect	18	90%
Function of group	19	95%
Teacher evaluation	19	95%

3 讨论

早在 20 世纪 60 年代后期,美国神经病学教授 Barrows 首先提出以问题为基础学习(Problem-Based Learning, PBL)的教学方法,是指学生自学与导师指导小组学习相结合的教学方法^[3]。PBL 教学包括如何选择和设计问题,要解决这些问题需要学习者获取关键的知识,熟练解决问题的能力,增加学习策略和技能参与团体活动,PBL 教学逐渐得到了各国教育机构的广泛应用^[4-7]。近年来 PBL 教学方法在我国医学教育中也得到了广泛使用^[8-9]。CBDL 教学是 PBL 教学的一种特殊类型^[1],有研究显示 CBDL 教学能使学生更有效地学习临床知识,增强学生自学和主动学习的意识和能力^[10-13]。

本研究显示 CBDL 教学组的理论考试成绩和临床技能考试成绩均明显提高(95.12 ± 7.13 vs 86.06 ± 8.11 , 94.89 ± 8.13 vs 82.07 ± 7.72)。CBDL 教学法是学生在学习了理论课知识的基础上,对病例所提供的其他各种资料进行分析,教师提供个性化的指导和帮助,引导学生完成任务,获得临床技能。CBDL 教学的核心是使学生真正成为学习的主体,自主学习与临床实践紧密联系,使学生对所获知识的掌握更为牢固^[14,15]。CBDL 教学通过以病例为基础,使学生成为主体,使学生对患者疾病的临床资料收集、分析、判断、思维方法更接近于临床。以小组为单位的讨论及汇报模拟了实际临床工作中各科医务人员需要团结协作,有利于培养学生的团队精神,通过这种以小组作为团队的教学过程,让学生提高了沟通技巧和人际交往能力^[16,17]。

本研究表明学生对 CBDL 教学的满意度较高。CBDL 教学使学生由被动学习变为主动学习,学生自己搜集资料、分析问题、讨论问题、解决问题,自学能力得到很大提高,为在以后的临床工作中解决实际临床问题打下了基础。CBDL 教学法在无形中锻炼了学生的获取资料信息、主动学习能力、独立思考能力、灵活运用知识分析问题、解决问题能力以及逻辑思维能力等^[18-20]。

总之,CBDL 教学方法能够提高学生的基础理论和临床技能,充分发挥学生的主观能动性,增强了学生解决实际问题的能力。学生在整个 CBDL 教学的学习过程中,改进自己的学习方法,巩固理论知识,迅速形成临床分析思维能力,且具备了更强的团队意识,为成为实用型医学人才奠定了基础。因此,CBDL 教学方法应用于临床教学是切实可行的。

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