

# Service Priorities and Programmes Electronic Presentations

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A Patient-centered Evidence-based Educational Intervention for Improving Glaucoma Patients' Eye Drop Therapy Adherence and Outcomes
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## **Keywords:**

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#### <u>Introduction</u>

Glaucoma is the leading cause of irreversible blindness in Hong Kong and worldwide. It brings psychological burdens to patients. Although glaucoma has no cure, early detection and effective eye drop therapy (EDT) can prevent or defer visual impairment through the effective control of intraocular pressure (IOP). However, studies found that most glaucoma patients do not observe EDT. Such poor adherence to therapies is attributed to multiple factors and leads to poor IOP control. Primary open angle glaucoma (POAG) patients are high risk, high volume and high drug cost users. More importantly, EDT is a lifelong commitment. Therefore, healthcare professionals are urged to provide effective educational intervention (EI) to help glaucoma patients to improve EDT adherence.

## **Objectives**

To develop an effective EI for POAG patients, it can help them to improve EDT adherence and health outcomes

### **Methodology**

A systematic review on educational intervention was undertaken. The review found that based on the Health Belief Model and Self-efficacy Theory, effective EI was proven useful to improve adherence. Studies demonstrate that, when combined with personalized behavioral change interventions, EIs that focus on patient education and skills development can improve the medication adherence of glaucoma patients. Based on the evidence, structured education program, written information, telephone hotline, and reminder calls may be useful to enhance self efficacy in the medication adherence and self-management at home.

## Result

Result & Outcomes: An educational intervention for POAG patients comprises of (1) watching a video developed by multidisciplinary team on self-instillation eye drop skills, explanation on the nature of glaucoma, its management, effects and

side-effects of EDT, and risk of non-adherence of therapy, (2) return demonstration on self-instillation eye drop skills, (3) questions and answers in the educational session, then (4) an information booklet, (5) five reminder calls and (6) a telephone hotline will be given to provide continual reassurance, encouragement, and support to them. Conclusions: Non-adherence presents a major issue in glaucoma clinical care. An EI is developed to improve POAG patients' EDT adherence and outcomes in terms of glaucoma knowledge, self-instillation eye drop skills, IOP, anxiety and depression, and quality of life. The quality improvement program has been implemented in January 2016 and its effectiveness will be evaluated by a randomized control trial in an ophthalmic center.