

Available online at www.sciencedirect.com

Public Health

journal homepage: www.elsevier.com/puhe

Short Communication

Improving eye care follow-up adherence in diabetic patients with ocular abnormalities: the effectiveness of patient contracts in a free, pharmacy-based eye screening

C.L. Aleo ^{a,*}, A.P. Murchison ^b, Y. Dai ^a, L.A. Hark ^c, E.L. Mayro ^a,
B. Collymore ^a, J.A. Haller ^d

^a Wills Eye Hospital, Research, 840 Walnut Street, Suite 802, Philadelphia, PA 19107, USA

^b Wills Eye Hospital, Emergency Department, 840 Walnut Street, Suite 802, Philadelphia, PA 19107, USA

^c Research Department and Glaucoma, Research Center, Wills Eye Hospital, 840 Walnut Street, Suite 802, Philadelphia, PA 19107, USA

^d Wills Eye Hospital, 840 Walnut Street 1510, Philadelphia, PA 19107, USA

ARTICLE INFO

Article history:

Received 16 May 2014

Received in revised form

4 March 2015

Accepted 13 May 2015

Available online xxx

Keywords:

Diabetic retinopathy

Contract

Appointment adherence

Screening

ABSTRACT

Objectives: Patient contracts are increasingly utilized in medical practice and have the potential to improve health outcomes in high-risk populations. However, as a relatively new tool, there has been limited research regarding the efficacy of patient contracts. Diabetic retinopathy (DR) is one of the leading causes of vision impairment in adults in the US and only 50–60% of adults with diabetes adhere to annual dilated fundus exam recommendations. This study aimed to evaluate the impact of patient contracts on follow-up adherence in diabetic patients with ocular abnormalities after a free, pharmacy-based eye screening.

Study design: This prospective study implemented a non-invasive, non-mydratic fundus camera in an urban, community-based pharmacy setting to screen for ocular diseases in patients with diabetes. Patients were assigned to the contract or non-contract group. Patients who signed a contract agreed to: 1) review their results with their primary care doctor, 2) follow-up with an ophthalmologist if their results were abnormal, and 3) inform research staff if/when they completed an eye care appointment. All study participants and their primary care doctors were notified of their results via mail. Follow-up questionnaires were administered to all patients by telephone three months after the screening results.

Results: 500 patients were screened and 113 (22.6%) had abnormal results. Of the patients who had abnormal results, 83 (74.3%) were able to be contacted. Of the 83 patients who were able to be contacted, the majority of patients were African American (73.5%) and female (56.6%). The mean age was 54.7 years. Of those, 34 (41.0%) adhered to follow-up recommendations. There was no significant difference in follow-up adherence between the contract (38.1%) and non-contract group (43.9%) ($P = 0.59$). In addition, 70.4% of patients did not comply with at least one measure of the contract agreement.

* Corresponding author. Tel.: +1 215 440 3158; fax: +1 215 825 9085.

E-mail address: caleo@willseye.org (C.L. Aleo).

<http://dx.doi.org/10.1016/j.puhe.2015.05.012>

0033-3506/© 2015 The Royal Society for Public Health. Published by Elsevier Ltd. All rights reserved.

Conclusion: Contracts did not increase follow-up adherence to eye appointments in diabetic patients with ocular abnormalities. The majority of patients did not comply with their contract and follow-up adherence was low in both groups. Most research has yielded mixed results regarding the efficacy of contracts in improving health outcomes. Therefore, different types of contracts or other patient-centered tools should be evaluated in order to increase follow-up adherence in patients at high risk for DR.

© 2015 The Royal Society for Public Health. Published by Elsevier Ltd. All rights reserved.

Introduction

Patient contracts are increasingly utilized in medical practice, with specific uses ranging from preventing drug abuse to promoting weight loss. In these contexts, a patient contract refers to an agreement in which a patient contractually obliges to commit to a set of healthy behaviours.¹ As a patient-centered tool, contracts can facilitate communication and help patients understand physicians' expectations. If effective, contracts have the potential to improve health outcomes.

Though patient contracts have been studied for over two decades, there is limited research regarding their efficacy. Most research to date has involved small samples and yielded mixed results.^{1–6} In a meta-analysis of 30 trials assessing the impact of patient contracts, the outcome measure favoured contracts in 15 trials, the outcome measure favoured the control group in six trials, and an outcome measure with no differences between groups was observed in 26 trials. The medium sample size in these 30 trials was 21 subjects, with only two studies having sample sizes over 100.¹

Because of mixed results in the literature and confounding variables, more research is needed to determine the efficacy of patient contracts, especially in the field of eye care. Only one trial, related to contact lens hygiene, examined contract efficacy in eye care and the results were inconclusive due to high adherence in both groups.² If effective, patient contracts could be used to target high-risk populations who exhibit low adherence to follow-up eye care. Therefore, contracts may be especially beneficial to patients who are at risk for developing diabetic retinopathy (DR). DR is one of the leading causes of vision impairment in adults in the US. Currently, the American Diabetes Association recommends that all people with diabetes have annual dilated fundus examinations (DFEs) to reduce their risk of vision loss. However, only 50% of older people with diabetes follow this recommendation.⁷

This prospective study implemented a contract intervention in diabetic patients who received a free, non-dilated fundus exam in an urban, community-based pharmacy. We aimed to assess the impact of contracts on follow-up adherence in participants with observable ocular abnormalities who were recommended to follow-up with an eye care provider.

Recruitment and contract terms

Following Institutional Review Board approval, participants were recruited from an urban outpatient pharmacy in Philadelphia, PA. Participants had to be at least 18 years of age and

diagnosed with diabetes (either self-reported or identified by a pharmacist through medication prescriptions). English and Spanish-speaking participants were eligible.

Following informed consent, participants were assigned to the contract or non-contract group. Participants who were assigned to the contract group signed a contract in which they agreed to: 1) review their examination results with their primary care doctor, 2) follow-up with an ophthalmologist if recommended, and 3) complete a 3-month follow-up questionnaire administered by the research staff via telephone. The contracts were explained to each participant and were emphasized to not have any legal impact on their health care.

Delivery of screening results and follow-up questionnaire administration

Participants were notified of whether their screening results were normal or abnormal via mail within three weeks of their screening. An abnormal result meant that an ocular abnormality was detected, indicating possible DR or another ocular disease. All participants with abnormal results were instructed to follow-up with an ophthalmologist within a specified time frame, depending on the diagnosis and the severity of disease. Within one month of receiving their results, participants with abnormal findings, regardless of being in the contract or non-contract group, also received a phone reminder advising them to make an appointment with an ophthalmologist.

Research assistants administered a follow-up questionnaire to all participants with abnormal findings by telephone three months after the screening results were distributed. The questionnaire addressed follow-up eye care utilization, satisfaction with the screening, and barriers to obtaining eye care.

A Chi-squared test was used to examine the association between contracts and follow-up adherence in participants with abnormal results. Statistical analyses were performed using SAS V9.3 software (SAS Inc., Cary, NC).

Screening results and contract adherence

In total, 500 participants received fundus exams at the outpatient pharmacy location. The participants were assigned to groups by alternating weeks; the 250 patients who attended screenings during odd weeks were assigned to the contract group and the 250 patients who attended screenings during even weeks were assigned to the non-contract group.

Download English Version:

<https://daneshyari.com/en/article/10516306>

Download Persian Version:

<https://daneshyari.com/article/10516306>

[Daneshyari.com](https://daneshyari.com)