Detection of Non-Glaucomatous Ocular Pathology and Barriers to Follow-Up in a Community Glaucoma Detection Program

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Purpose

- To evaluate the detection rates of non-glaucomatous ocular pathology requiring follow-up care and to identify the barriers to follow-up in a community-based glaucoma detection program.

Methods

Glaucma Detection Program

- 81 community screening sessions at 18 different community sites throughout Philadelphia, PA from January 2013 to September 2013.
- Detection sites targeted toward senior citizens and minority populations.
- Main goal to detect glaucoma, glaucoma suspect, or anatomically narrow angles (Fig. 1).

Non-Glaucomatous Pathology Follow-Up Assessment

- Patients diagnosed and recommended for follow-up ophthalmic care for non-glaucomatous ocular pathology were identified.
- All patients were called within 7 days of screening to remind them of their results.
- These patients were given a telephone survey to evaluate demographic information, medical history, and follow-up appointment status.
- Participants were called at least 4 months after initial screening.

Outcome Measures

- Prevalence of non-glaucomatous eye disease requiring follow-up.
- Follow-up rates.
- Associations between patient demographics, perceived barriers to follow-up care, and knowledge about their disease with actual follow-up compliance.

Statistical Analysis and Tests

- Wilcoxon non-parametric test and Fisher’s exact test.
- P values <0.05 considered statistically significant.

Results

Non-Glaucomatous Ocular Pathology

- 102/899 (11.3%) diagnosed with non-glaucomatous pathology (Fig. 2) requiring further ophthalmic follow-up care.
- Majority of diagnoses was visually significant cataract (n=62; 6.9% of total).
- Other major diagnoses detected included diabetic retinopathy (n=12; 1.3% of total) and macular degeneration (n=9; 1.0% of total).

Follow-up Rates After Referral

- 16/55 (28%) patients who responded to the survey attended a follow-up appointment (Fig. 1).
- Those who remembered their diagnosis and the follow-up recommendations at the screening were significantly more likely to make and keep their appointment with an eye doctor (Table 1).
- The most common response for not making an appointment was forgetting (37%), the vision was not bothering them (37%), and not knowing how to make an appointment (23%).

Conclusions

- A community-based glaucoma detection exam was able to identify a significant amount of non-glaucomatous ocular pathology requiring ophthalmic follow-up.
- Telephone survey response rates and follow-up exam rates are poor; similar to prior eye screening programs.
- Strategic efforts to help patients remember their diagnosis and follow-up recommendations may help improve follow-up rates after initial exams.
- Poor follow-up with outside referrals demonstrates the need for continued follow-up care at these community sites.

Table 1. Association between telephone survey responses and follow-up eye care

<table>
<thead>
<tr>
<th>Diagnoses</th>
<th>Make follow-up appointment (n)</th>
<th>Kept follow-up appointment (n)</th>
<th>p-value</th>
</tr>
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<tbody>
<tr>
<td>Cataract</td>
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<td>0.22</td>
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<td>Glaucoma</td>
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<td>Diabetic retinopathy</td>
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<td>0.053</td>
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<tr>
<td>Macular degeneration</td>
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<tr>
<td>Other</td>
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<td>0.03</td>
<td>0.13</td>
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</tbody>
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References


Financial Support:
Centers for Disease Control and Prevention Grant #U1USDP04060-01
Glaucoma Service Foundation to Prevent Blindness

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