Can We Skip Number Two for Better Eye Healthcare?

An assessment of the efficacy and demand of BRAC’s Patient Screening Program (PSP) in the dispersion of healthcare for cataract-inflicted patients

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Overview

In a randomized survey, we tested whether a program to disperse eye healthcare information to urban dwellers can be further improved by skipping a step in its protocol. We tested whether factors such as education and experience in healthcare may affect the diagnoses made by Community Health Workers (CHWs).

Background

- According to the WHO, cataracts are responsible for over 30% of visual impairment, which includes blindness.
- Blindness from cataracts is a public health issue in Bangladesh, particularly in the poorer communities where those without sight may find it difficult to contribute to the household and the national economy.
- Unlike other kinds of blindness, cataract caused blindness are easily treatable.
- Vision Bangladesh Project (VBP) aims to “reach the unreached” by identifying cataract cases, improving access to eye care and providing affordable treatment to disadvantaged people affected by cataract-caused blindness.
- The protocol to do so is led by CHWs. CHWs identify cataract cases, after which, the identified people are brought to the PSP for confirmational diagnosis and referred to hospitals for surgery.
- The purpose of this project was to assess the efficacy of the health field workers (CHWs) and necessity of the PSP in the determination of cataract-inflicted patients in VBP’s attempt to reduce cataract-related blindness.

Method

- Setting: Dhaka City, Gazipur and Narayangonj, Bangladesh.
- 60 randomly selected CHWs from the VBP were interviewed using a questionnaire, asking for information regarding education level, current and previous health care experience, and the volume of patients met and identified on a regular basis.
- Information from BRAC’s database was used to obtain reported diagnoses.

Results

Figure 1: Positive Diagnoses made at Step 1 by CHWs

Each point represents the percent of correct diagnosis per day made by CHWs. The data was received over a period of 12 weeks.

Figure 2: Years in School of CHWs

Education significantly varied between the CHWs of Dhaka and Gazipur.

No strong correlation between years of experience in healthcare or education and positive cataract diagnoses. But positive trend observed in both.

Interviews reveal that PSP is thought to be essential.

Total accuracy of diagnosis at Step 1 by CHWs were on average 62.4% in Dhaka City, 31.2% in Gazipur and 59.5% in Narayangonj.

Conclusions

Role of Step 2 in confirming diagnosis is concluded to be essential. It may be skipped if efforts are regionalized since CHWs in Dhaka City and Gazipur performed significantly better at cataract identification compared to CHWs in Narayangonj. A weak positive correlation between education and successful cataract patient identification is seen.

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