

Reasons for Non-compliance among Probable Diabetic Retinopathy Patients Referred from a Diabetes Clinic to a Tertiary Hospital

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INTRODUCTION

- ✓ **Diabetic Retinopathy (DR) is an eye condition that may be caused if a person has uncontrolled diabetes for a long time**
- ✓ **There are an est. 1.54 million DR cases in Bangladesh (27% of people with diabetes)**
- ✓ **All patients with diabetes must undergo annual eye check-up to prevent blindness**
- ✓ **The Diabetic Association of Bangladesh (DABs) have affiliated hospitals throughout the country, however most of these do not screen patients for DR**
- ✓ **The study location for this research is Barisal district under Barisal Division, where the DAB hospital currently screens patients for probable DR and refers them to the nearby government tertiary hospital for further DR management**

GAP ANALYSIS

- ✓ **Although the DAB hospital refers probable DR patients to an Eye Consultant, it has been found that about 60% patients are non-compliant, i.e. they do not follow up with an Eye Consultant**
- ✓ **These non-compliant patients may be thought to be priority patients who need immediate attention because they are at risk of permanently losing their vision**
- ✓ **Some reasons of non-compliance maybe lack of awareness about DR, lack of clarity about the referral system (i.e. when to avail services, how is DR managed and treated), fear of eye surgery and financial barriers among others**

RESEARCH QUESTION

“

What are the reasons of non-compliance among Probable Diabetic Retinopathy Patients Referred from a Diabetes Clinic to a Tertiary Hospital?

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OBJECTIVE

To find the underlying reasons why probable DR patients are non-compliant with referral instructions and thereby recommend program interventions to increase successful referral rate

METHODOLOGY

- ✓ **Cross-sectional study using mixed methods**
- ✓ **In-depth interviews will be conducted with both compliant and non-compliant patients referred from September 2017 to August 2018 (est. N=300) to understand the reasons why they do/do not avail eye care services at the referred facility**
- ✓ **To understand possible enabling factors for availing advanced eye care services, compliant patients will be surveyed**
- ✓ **Case studies will be conducted among 10 compliant and 20 non-compliant patients to validate quantitative findings and study patients' in-depth attitudes and perceptions**

STUDY DESIGN

- ✓ **Estimated sample size, N = 300**
- ✓ **Inclusion criteria: Registered patients with (known) diabetes who are referred from Barisal district diabetes hospital (DAB) to Barisal SBMC&H (tertiary hospital)**
- ✓ **In a later study, the non-compliant patients will be divided into control and intervention groups, to study the effect of a health education approach using Randomized Controlled Trial (RCT) approach**
- ✓ **This study is the first phase of a broader study**

STUDY DESIGN

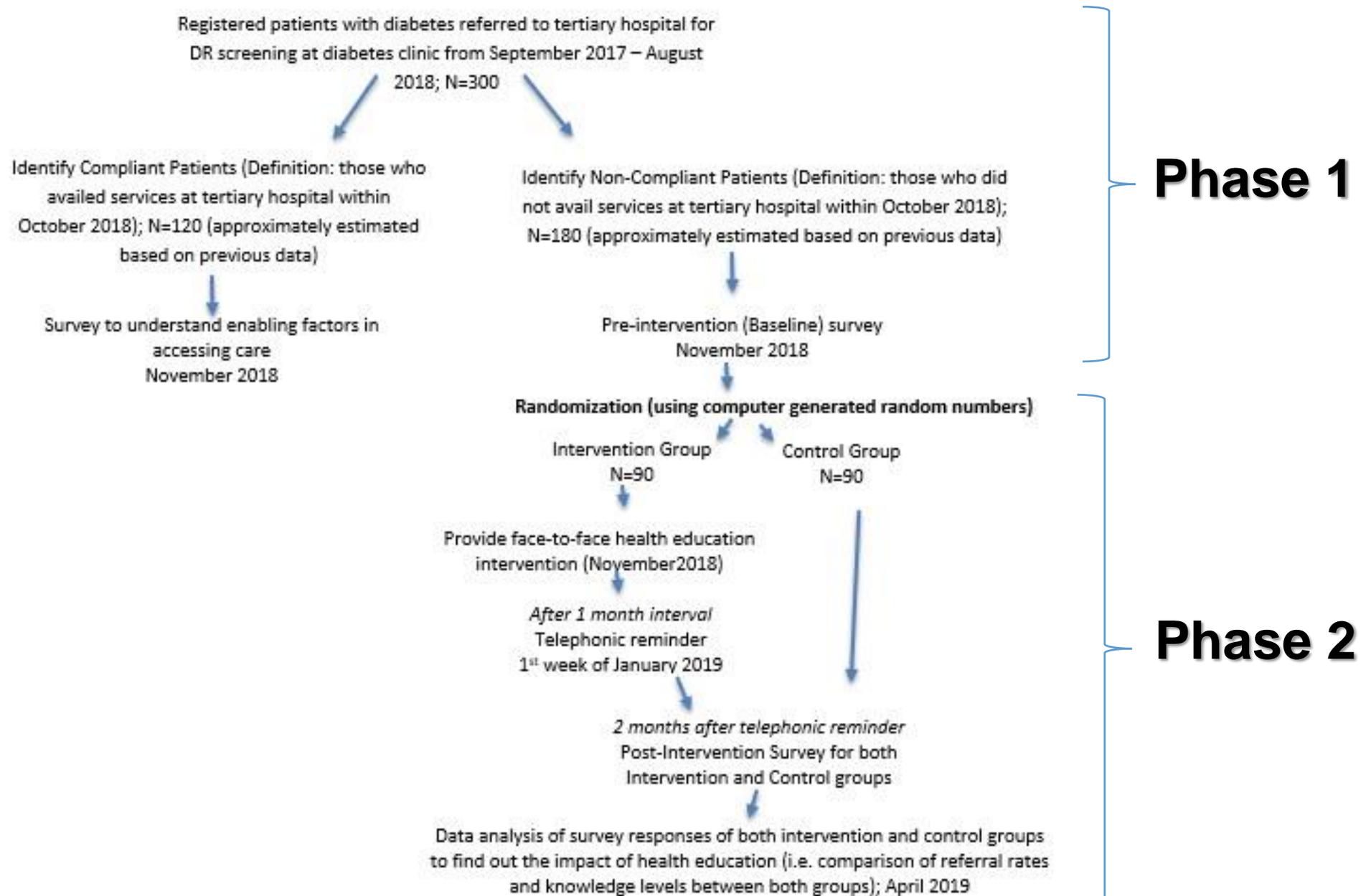
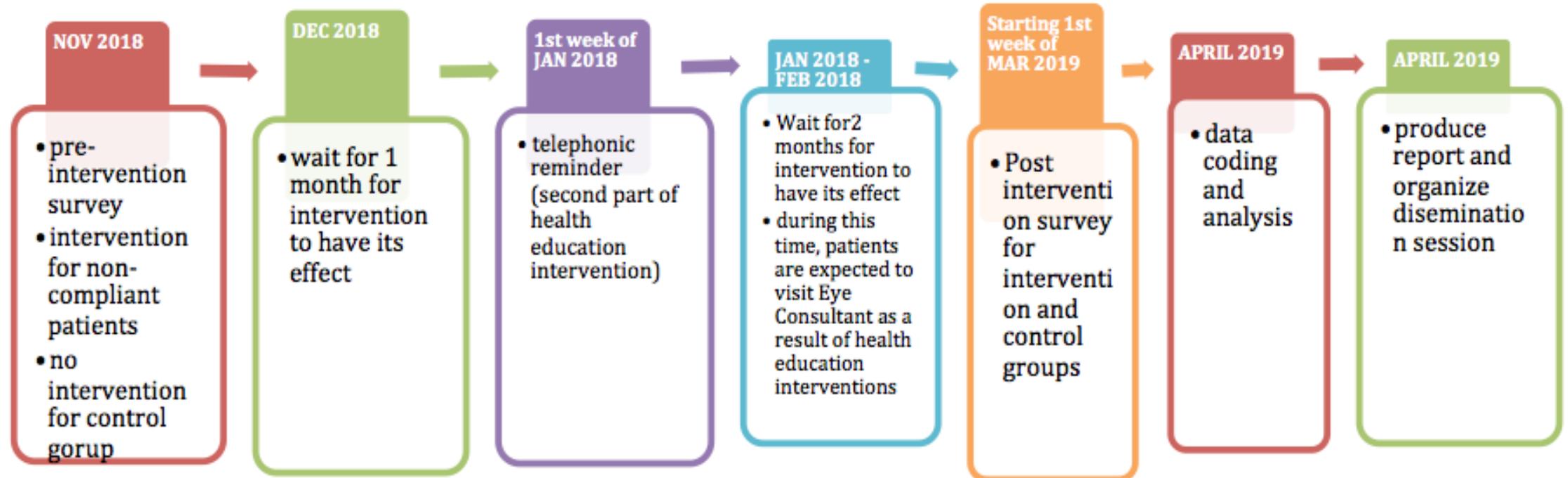


Figure 1: This flow-chart represents the study design using RCT Method

TIMELINE

- ✓ The survey of 300 patients will be conducted in November 2018
- ✓ After completion of Phase 1 and Phase 2, data analysis will be carried out
- ✓ Research findings will be available in April 2019



DATA ANALYSIS

- ✓ SPSS software will be used for data entry and analysis
- ✓ Multiple Logistic Regression will be used to identify variables that significantly influence successful referrals
- ✓ Other relevant statistical tests will be carried out

RESULTS

- ✓ Research findings will be available in April 2019
- ✓ The outcome of the research will be shared with service providers managing diabetes as well as eye care services in public and private sectors, academicians, scholars, experts, research institutions, policymakers and other stakeholders
- ✓ Government officials and NGOs (working on eye health) will be invited
- ✓ Journalists will be invited to this event to publish findings in Bengali and English national dailies
- ✓ The ethics clearance application has been submitted to Bangladesh Medical Research Council (BMRC) and is under review

DISCUSSION

- ✓ **This research will focus around the issue of ‘patient referral’ in DR management in an in-depth manner, which has not been previously covered in any research in Bangladesh**
- ✓ **Strategies of strengthening the referral system of eye patients from diabetes hospitals to an eye facility will be established**
- ✓ **Recommendations from this study will help to strengthen the existing referral system between diabetes hospitals and eye hospitals in other districts of Bangladesh**

THANK YOU