

INTERVENTIONS TO PROMOTE HEALTH LITERACY AMONG PATIENTS WITH CHRONIC DISEASE

- Dr Iliatha Papachristou Nadal
- Research Fellow and health psychologist
- London school of hygiene and tropical medicine
- 29th January 2020





GESTATIONAL DIABETES IN UGANDA AND INDIA: DESIGN AND EVALUATION OF EDUCATIONAL FILMS FOR IMPROVING SCREENING AND SELF MANAGEMENT (GUIDES)



PROJECT BACKGROUND

- Gestational diabetes mellitus (GDM) is a condition in which the body of pregnant women cannot control the levels of blood sugar.
- Most women with GDM in low and middle-income countries (LMICs) are undiagnosed and/or inadequately managed due to a lack of knowledge and skills about GDM on the part of both providers and patients.
- Both Uganda and India have national guidelines for GDM, which differ in screening, diagnosis and management.
- The main aim of the project is to develop and evaluate a package of three interconnected educational/behavioural interventions delivered through the medium of film.
- Films are a low-cost and scalable intervention, and can transcend barriers of literacy, making them ideal for LMICs.

OBJECTIVES

- The specific project objectives are to:

1) analyse the contexts (e.g. existing knowledge and skills, socio-cultural influences, infrastructure) in which the intervention will be implemented

2) develop a package of culturally tailored, local language films aimed at improving a) knowledge and skills of health providers in detection and management of GDM, b) awareness about GDM among pregnant women and their families, and c) confidence and skills in self-management of GDM among women diagnosed with the condition and their partners

3) evaluate the effectiveness of the intervention (i.e. combined package of GDM films) in improving timely detection, glycaemic control, and adverse perinatal outcomes of GDM

4) identify learnings for scaling up low-cost behavioural interventions in LMICs using films

HEALTH LITERACY THROUGH FILMS



- Evidence suggests that even highly effective interventions often fail to scale up in LMICs, if they are logistically challenging or require resource.
- Films are an exceedingly simple and scalable intervention.
- Films incur no ongoing costs and require minimal infrastructure.
- Films are highly engaging and exceeds barriers of low literacy, which is a challenge in LMICs



HEALTH LITERACY THROUGH FILMS



- Neuroscience research provides a strong theoretical basis for effectiveness of films
- Visual information is processed far more efficiently than text
- Especially in low-literacy settings where populations have limited opportunity to develop text-based processing skills.
- Visual cues influence points of view and behaviour, as well as influencing actions and decision-making.
- Evidence from LIMCs is mostly from programmatic distinct roles of films in low literacy settings.



3 SETS OF FILM PACKAGES

1. Professional development of doctors and nurses

To improve knowledge and skills in screening and management of GDM following the national guidelines, such as blood glucose monitoring and managing medication and neonatal care.

To improve skills in behavioural counselling



2. Raising awareness among pregnant women and their family members

To increase knowledge about GDMM and importance of screening plus healthy lifestyle education.

To address taboos and engage with family to support the woman through this process

3. Structured diabetes self-management education programme for women with GDM and their partners



EVALUATION PROCESS

- Interventions will be evaluated in two independent trials in Entebbe (urban and peri-urban/rural areas), Uganda, and Bengaluru(urban), India.
- The trials will be conducted in public hospitals and health centres with busy maternity units, as they serve the urban poor, who potentially have the biggest unmet need for GDM care
- This will be a cluster trial design. The films will be made available in the intervention arm:
e.g. for viewing by doctors and nurses at their meetings, for continual screening in waiting areas of antenatal clinics, and during group education sessions (and personal mobile use) for GDM patients
- Recruitment of 10,000 pregnant women in each country of which 10% (n=500) in intervention arm and 5% (n=250) in control arm are expected to be diagnosed with GDM.

STUDY OUTCOMES

- The main study outcomes are:
 - (a) proportion of women with a diagnosis of GDM (self-reported) at 32 weeks (co-primary outcome 1),
 - (b) mean fasting blood sugar and HbA1C in women with GDM at ~34 weeks (co-primary outcome 2),
and
 - (c) proportion of women with adverse perinatal outcomes related to GDM (self-reported composite of Caesarean section delivery, perinatal mortality, and infant hospitalisation within 6 weeks of delivery) (secondary outcome).
 - (d) A detailed process evaluation will accompany the trial to identify learnings for developing and scaling up low-cost behavioural interventions using films in LMICs.

HEALTH LITERACY IMPACT

- One key component of the planned intervention is to improve women's self-efficacy and their confidence in managing their own health.
- This - in conjunction with training in communication skills for health providers - should result in improved patient-provider relationships and more timely care-seeking.
- There will be additional benefits for peer supporters, as this role may act as a springboard to other training.
- A reduction in diabetes-associated complications may also result in benefits to other aspects of society.
- Benefits to families and households will include freeing up of income, as many healthcare costs are borne by individuals and their families, with this burden disproportionately felt by the most disadvantaged.



NEXT STEPS FOR GUIDES:



MRC / UVRI and LSHTM Uganda Research Unit



Uganda
Virus
Research
Institute

LONDON
SCHOOL of
HYGIENE
& TROPICAL
MEDICINE



PUBLIC
HEALTH
FOUNDATION
OF INDIA

