



INSTITUTE FOR  
GLOBAL HEALTH



Diabetic Association of Bangladesh



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**Diabetes: how talking and walking saves lives.**

***Results published in the Lancet Diabetes & Endocrinology, in the largest global population study of its kind, show how community groups can cut diabetes risk by almost two thirds.***

In Faridpur, rural Bangladesh, an unusual lottery is taking place. At a community meeting 96 villages' names are being put into a jar and coloured, folded paper slips are being drawn into three different groups. These groups are experimental arms of an unusual approach to preventing diabetes in a country, where almost a **third** of its population is affected by the chronic disease.

The first group of 32 villages will receive mHealth voice messages on their phones twice a week, the second group of 32 villages receive facilitated community group meetings once a month and the third will only receive usual care, visiting the doctor and paying for glucose testing if needed.

*“Before we didn’t have any idea about exercising. We didn’t know that diabetes can be controlled through exercise. We learned that from the meeting. We also didn’t know that we should eat more vegetables. We used to eat more rice. I was also like that.”* **Male Participatory Group Member, Faridpur**

*“We get together here, gossip and share with each other, which we enjoy. We discuss the meeting topics when we have free time and go for a walk. We are illiterate. It is not possible for me to read so when someone tells me something then it is easier for me to remember.”* **Female Participatory Group Member, Faridpur**

**Diabetes risk reduced by 64%**

Fast forward two years and the villages where community groups met regularly to chat about health, exercise, diet and stress, had reduced their diabetes burden by a dramatic 64% compared to the usual care villages. The mHealth villages saw an improvement in people’s knowledge of diabetes, but saw no changes in the burden of disease.

*“Rather than focusing on high-risk individuals or those living with diabetes, we chose a general population approach that emphasised empowerment and community awareness raising to change behaviours and reduce diabetes risk. By the end of the project villagers had a much better understanding of how to prevent and control diabetes, many had started exercise clubs and even lobbied local markets to sell healthier foods.”* **Associate Professor Ed Fottrell, Principal Investigator and Project Lead, UCL.**

*“That our group approach promoting mutual learning and collective action had such a dramatic effect on disease prevalence is remarkable – it challenges the individualised, high-risk focus of many interventions.”* **Professor Kishwar Azad, Co-Investigator, Diabetic Association of Bangladesh.**

*“As a group, people listen to us if we tell them something. But if we were not in a group and we told them something, people would consider us crazy and they wouldn’t listen to us. When a group of people do something, other people take it differently and try to follow the advice.”* **Male Participatory Group Member, Faridpur**

*“Diabetes is on the rise in Bangladesh, and around the globe, and the burden of the disease is significant not just on patients, but the health care system. This new research provides invaluable insight in the fight against diabetes in Bangladesh, offering promising results at a community-level. We’re thrilled to see such impressive results coming out of a project we funded through GACD.”* **Dr Mark Palmer, MRC Director of International Strategy and Chair Elect of the GACD Strategy Board**

### **What about the science?**

Results published today in the Lancet Diabetes & Endocrinology highlight the potential global effect of this practical, conversational approach to diabetes prevention. Funded by the UK MRC, this was the largest study worldwide to assess how to prevent diabetes in a general adult population of 125,000 people. Bringing people together in groups empowered them to cut their risk of diabetes by two thirds. The method is fun, engaging and cost-effective.

According to the research, if this community, “group-chat” approach was to be scaled up nationally, the government could save 51 million US Dollars in health care costs per year. The majority of those costs are incurred by patients and their families.

[The Bangladesh D-Magic](#) trial is funded by [MRC UK](#) under the Global Alliance for Chronic Diseases ([GACD](#))

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## Additional information – Diabetes Facts

- The global prevalence of diabetes amongst adults over 18 years has almost doubled since 1980 (4.7% in 1980 to 8.5% in 2014) [WHO](#)
- Diagnosed diabetes is 3 to 4 times more common in Bangladeshi men and women in the UK compared with the general population. [Diabetes UK](#)
- Diabetes prevalence has been rising more rapidly in middle and low-income countries. [WHO](#)
- There were approximately 7 million cases of diabetes in Bangladesh in 2017. Source? How much of total population? [International Diabetes Federation](#).
- Diabetes is a major cause of blindness, kidney failure, heart attacks, stroke and lower limb amputation. [WHO](#)
- Community groups using the conversational, action approach have also cut maternal and new-born deaths by one third in low-income settings. The World Health Organisation recommends this approach in low and middle income countries. [WHO](#)

## **Case Study Quotes for Social Media from Study Participants**

*“In my area people were not very aware. They didn’t exercise. Many ignored diabetes. But when they realized the consequences of diabetes they started walking regularly. I’ve seen twenty to thirty people walking along from Thakurpur to Satoir. It takes 40 minutes to go around that place.”* **Men’s group facilitator**

*“Initially, people said that people living in rural areas do not suffer from diabetes; it’s the disease of urban people as they are not as active as people in rural areas. But now people know from our meeting that diabetes can be controlled by maintaining healthy diet and proper exercise.”* **Men’s group facilitator**

*“When I am at home I listen to discussion issues of meetings from my wife. I have heard that if anyone has diabetes then have to take lots of vegetables, need to walk, avoid sweeten foods – I have learned these things.”* **Non attender**

*“I don’t have diabetes. But after going to meeting I changed my way of eating, like I take roti (flat bread) once as breakfast and rice for lunch and dinner. I take less rice and more vegetables. I also exercise. I try to stick to the rules of food and exercise to stay away from diabetes.”* **Women’s group attender**

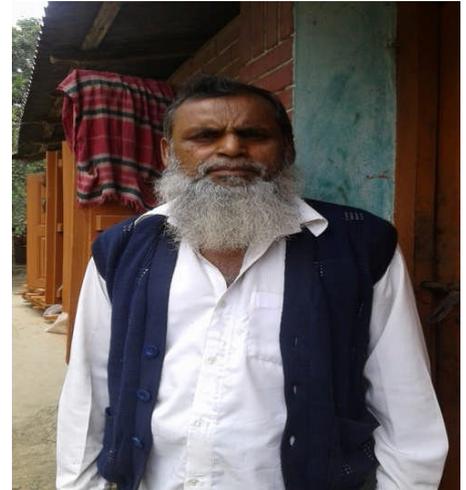
*“Seeing people exercise inspires others...if someone sees another walking others also get inspired.”* **Women’s group attender**

*“We used to use a lot of oil in our cooking. I did not realize before that taking oil is unhealthy; the facilitator told us that lots of oil is bad. Some other group members also said that we take too much oil. Now I don’t use so much oil in cooking.”* **Men’s group attender**

## Case Studies

### **The role of groups in changing behaviour and perceptions in the community**

Nizamuddin is a sixty-five-year-old farmer and lives in the Nargarkanda upazilla of Faridpur. When he first heard about the group meetings he was not really interested in attending them. He thought they would interfere with his farming and he explained *“I did not give importance to meetings on diabetes”*. However, when a neighbor asked him to attend a meeting with him he agreed.



At the meeting there were around 30 other men, and he learned a lot about diabetes. Two men shared about how they had managed to stop smoking and were now able to exercise regularly. Nizamuddin felt motivated to start to change his own behaviour and was soon a regular attendee at the group. He said no other NGO had ever worked in his village in this way – through forming groups within his village.

Through the group Nizamuddin has learned a lot about diabetes, the harm of smoking and the importance of exercise and a balanced diet. Because of what he has learned and the encouragement of the group he has managed to stop smoking and exercises every day. He started his own kitchen garden and tries to eat more vegetables and has reduced the amount of rice he eats. Nizamuddin is passionate about sharing his knowledge – with other group members he encourages people to exercise and have a more balanced diet. Through the knowledge spread through the groups and community meeting there have been other important changes in the village, such as changes in the way women are perceived. Previously Nizamuddin, like many people in the village, thought it did not look good for women to wander around outside the home. Now he and other men realise that it is important for women as well as men to exercise and walk around the village!

### **Walking in groups helps to control diabetes**

Monowara Begum is 56-years old. She is a housewife and lives in the Saltha upazilla in Faridpur. She was recently diagnosed with diabetes. Her doctor prescribed medication and recommended that she monitor her blood sugar, reduce her sugar intake, lose weight and walk regularly. While she took medication regularly, monitored her blood sugar and was able to reduce the amount of sugar she consumed and lose some weight she was reluctant to walk regularly. She did not enjoy walking and her blood glucose readings remained high.



When participatory groups were formed in her village, she was asked to attend the initial meeting. However, she was not sure about the meetings, but eventually agreed to attend the second meeting with a neighbour. She found the meeting interesting and relevant

and felt able to participate so continued to attend them regularly. Through the meetings she grew aware of the importance of regular exercise. But she was not comfortable walking alone in the village as she was worried about how it would look. **Others felt similarly, so in the meeting the members decided it would be easier if they walked together.** The group members thought there would be strength in numbers and if anyone questioned or criticised them they could explain why they were walking.

Following the discussions in the meetings, Monwara joined the other group members and started walking in the mornings. At first she found it tiresome, but she gradually got use to walking and eventually started enjoying the walks. Her diabetes is now under control.

**“The group is fun and together we can work together to change our lifestyle and our community.”**

Panna Begum is forty-eight years old and lives in the Nargakandha Upazilla of Faridpur district. Panna is a regular attender at the group meetings.

At first Panna was not interested in attending the meetings Nazma *apa*, the group facilitator asked her to just attend one meeting to see what she thought of it and Panna agreed. Before attending the meeting she had never heard of diabetes. However, just a few days after the meeting Panna’s mother in-law died due to the complications of diabetes.



Through the group meetings Panna learnt all about the symptoms of diabetes, who is at risk of developing diabetes, the complications of diabetes and how to prevent and control it.. At a group meeting she shared about her mother in-law, together the group members decided to raise awareness in the community.

Now Panna and the group members walk together regularly, they cook with less oil and have started growing vegetables at home. At home Panna and her family try to have a balanced diet with reasonable portions. Panna enjoys attending the meetings and spending time with the group members and feels the group have made a huge change in her life.