Diabetes Prevention Project in Rural Georgia

01 February 2014 – 01 July 2016
Internal end-of-project review report
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### ABBRIVIATIONS

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<tr>
<td>CBH</td>
<td>Community Based Health</td>
</tr>
<tr>
<td>DRC</td>
<td>Danish Red Cross</td>
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<tr>
<td>FGD</td>
<td>Focus Group Discussion</td>
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<tr>
<td>GP</td>
<td>General Practitioner</td>
</tr>
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<td>GRCS</td>
<td>Georgia Red Cross Society</td>
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<tr>
<td>IDP</td>
<td>Internal Displaced People</td>
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<tr>
<td>IFRC</td>
<td>International Federation Red Cross and Red Crescent</td>
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<tr>
<td>IFPMS</td>
<td>International Federation of Pharmaceutical Manufacturers &amp; Associations</td>
</tr>
<tr>
<td>MOLHSA</td>
<td>Ministry of Labour, Health and Social Affairs</td>
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<tr>
<td>MES</td>
<td>Ministry of Education and Science</td>
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<tr>
<td>NCD</td>
<td>Non Communicable Diseases</td>
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<tr>
<td>PHU</td>
<td>Primary Health Care Unit</td>
</tr>
<tr>
<td>TB</td>
<td>Tuberculosis</td>
</tr>
<tr>
<td>ToR</td>
<td>Terms of Reference</td>
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<tr>
<td>WDF</td>
<td>World Diabetes Foundation</td>
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<td>WHO</td>
<td>World Health Organisation</td>
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EXECUTIVE SUMMARY

Diabetes prevention, detection and care project for rural Georgia commenced February 2014 till July 2016. The project has been implemented in the Gardabani District of Kvemo Kartli Region of Georgia with funding support from World Diabetes Foundation (WDF) and Danish Red Cross (DRC). The aim of the project was to see improved diabetes prevention, detection and care, and in Kvemo Kartli Region, Georgia and to achieve; 1) Improved primary prevention and detection of diabetes and 2) Strengthen secondary prevention of diabetes.

This end-of-project review was intended to assess the relevance, efficiency, effectiveness, impact and sustainability of the project in relation to the objectives and supporting outputs and based on the review findings to develop a set of key recommendations for future collaboration between Danish Red Cross and Georgian Red Cross Society (GRCS).

Project achievements:
All seven activity groups in the project results have been fully achieved or overachieved e.g. not least the double number than planned of Master Trainers and instead of 12,000 people planned to be screened the result was 13,614. The project’s positive achievements can be a sign of the relevance and need for; NCD interventions in Georgia, for capacity building within the Georgian health sector, the huge need for volunteer engagement as a potential local resource and not least the good reputation of GRCS and their capacity to mobilize community volunteers.

It was very positive to note that the capacity building of existing Primary Health care Units (PHU) has resulted in a similar increase in number of people screened for diabetes as from the GRCS mobile unit with each of the two approaches covering almost half of the target population and achieving comparable results. The PHUs are permanent structures of the Georgian health system and the screening function has by the project been shown as a sustainable intervention depending on Ministry of Labour, Health and Social Affairs (MOLHSA) supply of diagnostic disposal equipment only.

It was relevant to document NCD prevalence in Georgia and to develop primary and secondary diabetes prevention models:
Although Georgia is in the process of developing a national NCD plan, there is currently no specific national diabetes plan. No public services are funded for primary diabetes prevention; limited resources exist for diabetes diagnosis and funding for self-management education programs are very limited. Overall diabetes is a growing concern in Georgia, but a national policy, strategy or action plan for diabetes or a document that integrates prevention actions for NCDs and their shared risk factors do not exist.

This project has been extremely relevant in a country as Georgia, with a growing NCD burden and with no official diabetes prevention plans. Combined with a scenario where diabetes screening has been inaccessible for most rural or poor population groups, make this projects community based approach to diabetes prevention and screening very relevant to Georgia. By this project GRCS has shown an example of a relevant and effective approach to diabetes primary and secondary prevention.

By project start only 29% of people diagnosed with diabetes had access to care service and of those 70% lived in the main city of the Gardabani District. Today’s situation is that the number of diagnosed diabetes clients in the district has increased from 94 to 1468 people (more than a x15 increase). All newly diagnosed people with diabetes have been trained in self-management of diabetes and 1042 people (71%) has been involved in self-support groups.

The project in itself is relevant in an attempt to document incidence and prevalence rates of diabetes in rural Georgia. Prevention is in general the most cost-effective public health intervention and here in the form of preventing a number of diabetes incidences, by avoiding premature deaths, and by improving life quality for a number of people living with diabetes.

Efficient community based approach, self-assessment before screening, diabetes service capacity and self-help groups:
GRCS can by this project document an effective community mobilization approach to diabetes prevention, a cost-effective method for diabetes screening and a realistic secondary disease
prevention approach in form of taking the secondary prevention services to the users combined with building capacity for self-management and self-help group support.

The rural and community based approaches used for awareness raising has been efficient. This has been documented by an end-line survey showing that the knowledge level has increased drastically e.g. “knowing overweight as risk factors” increased from 32% to 88% of the surveyed population. Places of residence was although significantly associated with the awareness level of diabetes management, with more representatives of rural population able to define “how can the disease be managed” compared to people from urban/semi-urban settings (50.3% vs. 28.4%). This indicates that the community based approach has worked better in a rural setting than in a semi-urban setting.

The implemented approach has been successful in raising awareness in a sizable population and among a significant part or almost 100% of the district health personnel. Most of the trained 216 community volunteers have been active throughout the project period with an almost zero fall-out percentages. One disadvantage has although been that there are more female volunteers than male (70% to 30%), but more men with diabetes than women, and more men are busy in normal working hours so at times it was difficult to make the best and most efficient peer-support match.

The approach of community mobilization by volunteers and support for individual diabetes self-assessment has been a cost-efficient approach to screening of high risk persons only and thereby saving on screening resources. Also the detection of 11% people with diabetes might have saved suffering and early death among a sizable group of people. A more detailed self-assessment method could possibly have resulted in less than the current 25% of people that have self-assessed to be at high risk, and therefore the screening could be even more focused.

The project has convincingly strengthened the national capacity on diabetic services in Gardabani District. All medical staff interviewed reported that they now feel confident in dealing with people living with diabetes and for referrals under suspicion of having diabetes. It was in addition positively noted that nurses have been involved and recognized in diabetes care for having played a significant role in the project.

The effect of self-support groups were not widely reported in the conducted focus group discussions, but family involvement and support from family members were observed in all communities visited, and diabetes seems to have become a family identity, more than an individual disease problem. It was reported that before there were stigmatization or self-stigmatization in relation to having diabetes, but today people are much more open about the disease. The combined efforts of volunteer support, upgrading of skills for medical staff and establishment of self-help groups can all be contributing factors to the reduction in self-stigmatization.

**Sustainability and advocacy in the project:**

The sustained behavior changes have been recognized in target communities and healthy living practitioner e.g. diabetes clients, community volunteers and members of self-support groups will continue communicating about and supporting a healthy lifestyle with a self-sustaining positive impact.

Sustainability of the project has been a concern, in particular patient follow-up possibilities after diagnose with diabetes has been mentioned as a concern. The organizational sustainability of changes in the Georgian health system can be an overall concern, but only from a financial perspective. Trained nurses, medical doctors and endocrinologists are ready to use their diabetes knowledge and will continuously use their experiences from this project into their daily practice. Only the referral mechanisms and access to secondary specialist services will depend on the existing health system, which again will depend on MOLHSA priorities and funding resources. The major concern and competing agenda in Georgia public health budget has been a recent introduction of a universal insurance scheme.

GRCS has gained and can sustain a number of experiences from the diabetes project implementation. Diabetes prevention and care material has been developed in cooperation with Georgian Welfare Foundation, Georgian Diabetes and Diagnostic Centre and is an existing sustainable resource. As well as the diabetes stakeholder network which has been established via this project and the GRCS partnership with MOLHSA and local authorities are networks that can be build further on.
To bring diabetes higher on the national agenda in Georgia is a pressing need but also an expected slow process. The project and GRCS have developed a "diabetes prevention and improved health service accessibility” advocacy plan with four objectives, relevant activities and specified target groups. With a defined advocacy team conducting monthly meetings it was hoped that the project could build advocacy capacities at different levels of the project, among stakeholders, national interest partners, local government leadership and media representatives. As a first time advocacy tool many activities have been implemented, and no doubt with good effect, only that evidence of “bringing diabetes on the agenda” is hard to present. The Deputy Minister from MOLHSA although directly asked, mentioned diabetes together with Hepatitis B as the new priorities of the Ministry. GRCS has by this initiative established an Advocacy Group and created a good network at local and national level but their potential as an advocacy and health networking organization still has scope for advancing.

The low-cost model demonstrated in this project will ideally be a model for the Ministry to embark on. Therefore the diabetes prevention models need to be described and impact documented to be used as an advocacy tool in Georgia and for inspiration within the Red Cross Movement.

Advocacy attempts for District municipality to provide financial support for covering running costs of the mobile health unit has been intensive, but with no actual financial support for 2016. The GRCS Gardabani Branch has although close connections to the local Municipality and has managed to get support for other issues including a special focus on support for Internal Displaced People (IDP). This close collaboration could be a positive entry into next year’s financial negotiations, so there might still be hope for achievements in this area. The future of the mobile health unit will still have to be considered and negotiated for the 2017 activity planning process.

**Effectiveness and impact:**
The end-line survey has documented effective and huge impact increase on knowledge and practice around diabetes, health-seeking and health-risk behaviors, physical activity and healthy eating habits. Both GRCS and DRC hope to publish the survey report in local and global scientific journals. The survey report shows that there is no doubt that the objectives of improved primary prevention and detection of diabetes in Gardabani District have been effectively reached.

The main barriers that individuals faced after being diagnosed with diabetes in Gardabani District (mentioned by 92%) were the cost of healthy food, combined with the cost for access to medicine, barriers that still need to be addressed in the Georgian context. The methodology used for primary prevention, diabetes screening and detection, seems to have been of a quality and approach that have been fully accepted by the target groups and have contributed drastically to the realization of the primary prevention objective. In order to strengthen the secondary prevention objective, factors such as access to health care services, medical supply, clinical care and healthy living approaches are reported still to be barriers of individual cost concerns.

Not only has the project been able to document substantial impact indicator progress but also other positive and unexpected results have been achieved, examples being: positive attitude towards diabetes patients, reduced self-stigmatization and family involvement in diabetes care. While malpractice and self-treatment of diabetes were common before, professional medical service demand has increased today. Among the less positive results could be mentioned: raised expectations of easy access to diabetes screening, outreach services and secondary preventive services provided by specialists, services that might be interrupted by the stop of the project and financing of running costs for the mobile unit. It can although be said that the positive and unexpected effects have outbalanced the negative effects both in the short and longer term perspective.

**Conclusion and recommendations:**
In the short term perspective more than 50,000 people has an increased knowledge about diabetes prevention, diagnosis and treatment, 13.600 people has been screened for diabetes and approximately 1.500 people have been diagnosed with diabetes and trained in diabetes self-management and more than 1000 people has regular been involved in self-help groups in the project period and target areas.
On a national level GRCS has increased its capacity in the area of NCD and diabetes management programming, has actively engaged in networks with local diabetes actors and has raised awareness and advocated for NCD actions at Ministerial level.
In a longer term perspective GRCS is, based on this positive experience eager to replicate the success of this project into other geographical areas, to develop new diabetes primary and secondary prevention activities and to engage in NCD advocacy activities more broadly. This, combined with the partnership experience between DRC and GRCS, would make diabetes prevention an obvious technical area for further cooperation.

Finally this review has come up with 15 concrete recommendations which are listed below, and a few key lessons learned and good practices which are mentioned in the end of the report:

**Material and methods:**

1. All the IEC material developed and used in this project is very text heavy – the material need to be revised, made in a simpler form with more illustrations and preferably also translated into relevant minority languages

2. It would be a good practice to monitor training effect and ensure refresher training e.g. from health department to Master Trainers and from Master Trainers to GRCS volunteers on a six or 12 monthly basis

3. Implementation methodologies should be evaluated and considered for future behavior change communication approaches e.g. use of peer-group approach, role-models and approaches for youth involvement

4. Self-support groups should be strengthened and supported by volunteers to ensure more comprehensive approaches (e.g. to include psychosocial support, access to health services etc.)

**Sustainability:**

5. Sustainability of the more costly service delivery interventions (mobile unit and outreach service) needs to be analysed and private business financial support, in-kind support and minimum package exit support should be considered as interim means. Until MOLHSA can take on the service delivery responsibility, strong advocacy means are needed

6. GRCS organizational sustainability needs strengthening in form of both volunteer management, volunteer retention and development, branch development and resource mobilization capacities

**Advocacy actions:**

7. Work of an Advocacy team and on an advocacy plan should be a GRCS overall approach and continue regardless of project funding to achieve long-term result of project investments

8. Advocacy on public policy level, strengthening of patient organizations or MoU with other relevant stakeholders have the potential for long-term effects and should be tried out as GRCS sustainability approaches

9. This diabetes prevention project model needs to be clearly described and impact documented to be used as an advocacy tool in Georgia and for inspiration within the Red Cross/Red Crescent movement globally

10. A technical sound End-line survey has been carried out that might be scientifically published and used as an advocacy tool

11. Access to medication and healthy living need further attention. In particular advocacy for diabetes medicine to be included on the essential medicine list should be a priority as well as advocacy regarding local adaptation/simplification of diet advices

**Future cooperation:**

12. Project modification and replication is strongly recommended, based on existing investment in e.g. NCD prevention and healthy living promotion material and experiences

13. Future project direction could/should be adjusted based on lessons learned, donor possibilities and in particular to the Red Cross added value. This might be with focus on community based
and volunteer based approaches with less service delivery focus and equivalent sustainability concerns

14. This specific diabetes model and approach is most appropriate and/or effective for rural communities and less for urbanized communities. Approaches need to be adjusted to future NCD interventions targeting other beneficiary groups

15. The GRCS and DRC partnership till 2020 should concretely work together on; NCD prevention, strengthening of advocacy capacities and results and volunteer diversity (as per agreed Country Strategy)

1 INTRODUCTION

This diabetes prevention, detection and care project for rural Georgia commenced in February 2014 and ended in February 2016 and was later granted a non-cost extension till July 2016. The project has been implemented in the Gardabani District of Kvemo Kartli Region of Georgia with funding support from World Diabetes Foundation (WDF) and the Danish Red Cross (DRC).

The overall aim of the project was to see improved diabetes prevention, detection and care in Kvemo Kartli region, Georgia, with two immediate objectives; 1) Improved primary prevention and detection of diabetes and 2) Strengthen secondary prevention of diabetes.

Primary prevention of diabetes is achieved through training of village level volunteers who conducted awareness raising campaigns in the communities and arranged different events, such as folk concerts, sports competitions and household visits. Detection of diabetes was done through training of local doctors and nurses, screening campaigns in existing health facilities and in villages without health facilities through the project mobile unit. Finally, the project established and trained self-support groups for people diagnosed with diabetes, their family members/people taking care of them or at-risk of diabetes in all target communities. The project has been implemented in Gardabani town and 40 surrounding villages of Gardabani District.

The geographical target area has for this diabetes prevention project in rural Georgia been Gardabani town and 40 villages in Gardabani District, Kvemo-Kartli region, Georgia (86% rural, 52% Azeri, and 50% op people living in extreme poverty).

The planned target group was 50,000 people in the target area including youth and people-at-risk of diabetes, 8,000 people at-risk of diabetes intended to be screened, 70 medical doctors to be trained around diabetes, 800 new cases of diabetes diagnosed and 1,000 people with diabetes receiving secondary prevention support.

The project intended to address a growing concern and low knowledge of NCDs and their risk factors, the increasing number of diabetes cases and the low diagnostic and diabetes
care capacities in Georgia. The project hoped to generate information on a cost-effective diabetes prevention and screening model to be used for advocacy to bring a higher attention to NCDs and diabetes in particular, in Georgia.

The International Diabetes Federation Diabetes Atlas 2012 estimates that there are more than 300,000 people with diabetes in Georgia, corresponding to a prevalence rate of 9.2%. However, it is likely that the situation is severely underreported and that many people remain unaware of their status and therefore do not receive the necessary treatment and care to avoid the development of severe complications. The health care system is not equipped to deal with the growing threat and NCD burden. Doctors and nurses in Georgia have very limited training in diabetes symptoms, diagnostics and care and health facilities are not equipped to perform even basic screening of NCD at-risk patients. The project aimed at building capacities at community level by training community volunteers, establishing self-support groups and developing capacities of doctors and nurses. In addition, the project had an advocacy component to encourage authorities to improve accessibility of medical services in particular for diabetes screening, diagnose and secondary diabetes prevention.

The objectives of the end-of-project review was to assess the relevance, efficiency, effectiveness, impact and sustainability of the project in relation to the objectives and supporting outputs set out in the Project Document. Based on findings from the end-line survey, one objective was also to develop a set of key recommendations for future collaboration between Danish Red Cross and Georgian Red Cross Society in the area of NCD.

Five generic evaluation criteria have been used as per the Terms of Reference (ToR) in Annex 1: relevance, efficiency, effectiveness, impact and sustainability. These criteria will be presented in this report and each relates to the Logical Framework in the following way – Figure 1:

The ToR has has been focused down to specific questions to be answered by elaborating on the five evaluation criteria:

**Relevance:** Should activities be continued or terminated based on relevance and cost-effectiveness?

**Efficiency:** Does the project represent good ‘value for money’? Are activities likely to continue following withdrawal of the project from target areas? What are GRCS future plans
for working within the field of diabetes? What could be a focus of potential new DRC/GRCS diabetes project? Has the project collaborated with national and local authorities and other partners outside the Red Cross Movement and what has been the result?

**Effectiveness:** Has project objectives been reached? Has the technical quality and appropriateness of methodologies and approaches been applied? Has the implementation of the project across two departments (health and social welfare departments) been effective?

**Impact:** Has the project contributed towards reducing vulnerability in the targeted communities?

**Management and Partnership:** How has the working relationship between DRC and GRCS developed throughout the project period? Has attempts been made to promote harmonisation with other partners?

The end-of-project review was undertaken by a combined GRCS and DRC team in the period 30th May to 3rd June 2016. The methodology used for data collection during this review process was largely qualitative and included:

1) Review of documents and reports;

2) Six semi structured interviews with key informants; GRCS Head Quarter (Project team), GRCS Gardabani Branch (project team), external partners at national level from Ministry of Labour, Health and Social Affairs (Mr. Valeri Kvaratskhelia, Deputy Minister), Ministry of Education (Ms. Ketevan Grigolia, Head of General Education Management and Development Department, and Ms. Tamar Malazonia) and local external partners (Zviad Machabeli, Deputy Head of Municipality, Aza Oniani, Head of Health and Social Department and Ekaterine Uchara – Head of Law and Infrastructure) and finally with Health Research Union that is in the progress of conducting an end-line survey of the project.

3) Seven focus group discussions (FGD) including different groups of beneficiaries, project implementers, volunteers and medical staff from local clinics. Visits were conducted to five different villages (one mainly populated with Azeri minority group at the border to Azerbaijan) and local clinics to meet staff and beneficiaries. Estimated 40-50 people participated in the FGD. To the extent possible, triangulation was used to verify and validate information by asking different focus groups similar questions about training, access to services, changes and impact as a result of the project. An example of the interview guide can be found in Annex 6.

## 2 PROGRESS

The general progress of the project can be measured by level of activities implemented and as per intended project results in the project proposal. Below are the documented and reported activity results for all seven activity groups and the evaluation results for each activity group.

**Evaluation ledger:**

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<tr>
<td>Results fully achieved</td>
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<tr>
<td>Results achieved to satisfaction</td>
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<tr>
<td>Results not achieved to an acceptable level</td>
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</tbody>
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**Table 1 – Activity progress**

<table>
<thead>
<tr>
<th>No.</th>
<th>Activities</th>
<th>Targets</th>
<th>Achievements by end of project</th>
<th>Evaluation</th>
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<tr>
<th></th>
<th>Training of GRCS volunteers in primary prevention and detection of diabetes</th>
<th>210 volunteers, 25 Master Trainers/nurses, 70 GPs trained</th>
<th>216 volunteers conducting peer-to-peer education, 50 Master Trainers, 73 GP trained</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.2</td>
<td>Diabetes awareness raising and promoting healthy lifestyle among general target communities, youth and people at-risk</td>
<td>50,000 people (including youth and at-risk groups) have increased their awareness on diabetes and healthy living</td>
<td>62.037 people have participated in awareness-raising events (some double counting could appear)</td>
</tr>
<tr>
<td>1.3</td>
<td>Development of Information, Education, Communication (IEC) materials for people at-risk, general public/communities, youth and handbook/guidelines for volunteers, medical doctors and nurses</td>
<td>20,000 flyers, 500 posters, 250 handbooks, 70 training manuals, 420 visibility items</td>
<td>20,000 flyers (distributed from Aug. 2014 till June 2015), 750 posters (distributed from Nov. 2014 till April 2016), Manuals for volunteers distributed 425 visibility items</td>
</tr>
<tr>
<td>2.1</td>
<td>Strengthened secondary prevention of diabetes in rural areas</td>
<td>70 medical doctors trained 3+2 days, 110 nurses trained, 210 volunteers trained</td>
<td>73 doctors trained, 110 nurses trained, 216 paramedics, teachers and others trained</td>
</tr>
<tr>
<td>2.2</td>
<td>Establishment and regular visits of mobile unit in areas with no facilities (PHU)</td>
<td>12,000 people at-risk expected to be screened for diabetes by mobile unit and by PHU(^1), 800 new cases expected to be diagnosed</td>
<td>13,614 people screened of which 6172 screened from 21 villages without PHU and 7442 from 19 villages with PHU, 1468 diagnosed diabetes people in project period and target area</td>
</tr>
<tr>
<td>2.3</td>
<td>Establishment of self-support groups of persons with diabetes and peer-support</td>
<td>41 self-support groups established</td>
<td>45 self-support groups with 1042 members established and 1015 meetings recorded, 10 &quot;walk and talk&quot; clubs, 10 cooking classes</td>
</tr>
<tr>
<td>2.4</td>
<td>Development of educational materials for persons with diabetes, peer-educators, GP and nurses</td>
<td>1000 brochures on “Diabetes complications and health nutrition”</td>
<td>1468 people with newly diagnosed Diabetes Type 2 provided with care and trained on diabetes-self-management (secondary prevention), And brochures has been distributed on diabetes complications and health nutrition</td>
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\(^1\) Inconsistency in numbers mentioned in the application due to minor error when developing final PPA. This has been corrected and the final target for people screened is 8,000.
For all activity groups the results have been fully achieved or overachieved e.g. three extra general practitioners (GP) trained, six extra volunteers trained and not least the double number of Master Trainers trained than planned and instead of 12.000 people planned to be reached with screening, 13.614 people was screened by project completion.

The overachievement shows the great relevance and appropriateness of the project. At the same time it indicates that there is a great need for specialised capacity building within the Georgian health sector and in the Georgian population, tasks that GRCS has achieved with great success through their good reputation and their capacity to mobilise engaged community volunteers.

It is very positive to note that the capacity building of existing Primary Health care Units (PHU) has resulted in a similar increase in number of people screened as from the mobile unit, with the two approaches covering each almost half of the target population. The PHUs are permanent structures of the Georgian health system and the screening function can be expected to be sustainable depending on Ministry of Labour, Health and Social Affairs (MOLHSA) supply of diagnostic disposal equipment only.

3 FINDINGS

3.1 Relevance

Relevance refers to the extent to which the intervention is suited to a key problem and situation in Georgia, to the priorities and policies of the Government of Georgia, GRCS and strategies within the Red Cross/Red Crescent Movement and Danish Red Cross.

3.1.1 Relevant to document NCD prevalence in Georgia

NCDs are one of the major health and development challenges of the 21st Century and unfortunately are key barriers to poverty alleviation and sustainable development in many places. In this situation WHO specifically recommends that:

- “All countries need to set national NCD targets and be accountable for attaining them
- “Countries can move from political commitments to action by prioritizing high-impact and affordable interventions”
- “Structures and processes for multisectoral and intersectoral collaboration need to be established”.

Diabetes is a growing concern in Georgia, but a national policy, strategy or action plan that integrates several NCDs and their shared risk factors do not exist. Although Georgia is developing a national NCD plan, there is currently no specific national diabetes plan. The Georgian public health service does not currently include funds for primary diabetes prevention, diabetes diagnostics or self-management education programmes.

This project has been extremely relevant in a county as Georgia that is not prepared to deal with the growing NCD burden and with no official diabetes prevention plans or diabetes prevention investment. Combined with a scenario where diabetes screening has been inaccessible for most rural or poor population groups, the community based approach to diabetes prevention and screening that has been applied is very relevant to Georgia. Through this project GRCS has shown an example of a relevant and effective approach to diabetes primary and secondary prevention.
The diabetes prevalence rate (proportion of a population that has the condition) in Georgia was estimated to be 9.2% by 2012 and in the 2016 WHO diabetes profile it is reported as high as 15%\textsuperscript{2}. Globally, the diabetes prevalence is similar for men and women but it is slightly higher for men younger than 60 years of age and for women at older ages. The increase in the diabetes prevalence can partly be explained with the demographic changes taking place, with a growing elderly population, a trend that can be foreseen to continue for many years in the future.

The target communities were at the project start underserved and had limited access to low quality public diabetes health care service provision. Today’s situation is that the number of people diagnosed with diabetes in the District has increased from 94 to 1468\textsuperscript{3} people (more than a x15 increase). All people recently diagnosed with diabetes have been trained in self-management of diabetes and 1.042 people are involved in self-support groups.

The project in itself is relevant in the attempt to document incidence and prevalence rates of diabetes in rural Georgia. This will give GRCS and other NCD stakeholders the ability to advocate and promote for a national NCD prevention policy, a diabetes action plan, healthy lifestyle promotion, making screening accessible etc. which currently is a concern in Georgia. No government can afford to ignore the rising burden of NCDs. The human, social and economic costs of NCDs will continue to grow and overwhelm the capacity of Georgia to address them.

3.1.2 Relevant primary and secondary diabetes prevention

Prevention is in general the most cost-effective public health intervention, so this project has in itself been very relevant and cost-effective by preventing a number of diabetes incidences, by avoiding premature deaths, and by improving life quality for a number of people living with diabetes. The project will be even more relevant as documentation and advocacy tool to stakeholders and the Ministry (MOLHSA) for a simple community based approach for rural diabetes prevention and care. GRCS can by this project document an effective community mobilisation approach to diabetes prevention, a cost-effective method for diabetes screening and even a realistic secondary disease prevention approach in form of taking the secondary prevention services to the users in combination with building capacity for self-management and self-help group support.

It will still be relevant and with expected great impact to raise diabetes awareness in many more of the 67 districts in Georgia, awaiting the public health system to be able to take over this task. In particular addressing youth and work further with effective awareness raising and screening methods for diabetes high-risk population is necessary. It will continuously be relevant to understand and implement actions for preventing the NCD shared risk factors, as the probability of dying between the age of 30 and 70 from the four main NCDs is 22%\textsuperscript{4} in Georgia, and the majority of premature NCD deaths are preventable.

The project has been highly relevant in keeping with the needs of beneficiaries and as no national policy exist also relevant to document the needs and advocate for strategies in the areas of NCD. The project has been relevant on an operational as well as a strategical level.

\textsuperscript{2} http://www.who.int/diabetes/country-profiles/geo_en.pdf?ua=1 - WHO diabetes country profile 2016
\textsuperscript{3} GRCS Project reports
\textsuperscript{4} WHO 2014 Georgia country profile
The current and other NCD project activities are very relevant to be continued as the diabetes disease patterns and all NCD risk factors are on the rise in Georgia. As well as the health system is not ready to respond to the growing needs. Red Cross volunteer interventions can be cost-effective and a life-saving benefit both for direct beneficiaries and to the entire social system in Georgia.

### 3.2 Efficiency

Efficiency refers to how economically the resources and inputs (financial and human) have been converted into results and outputs.

#### 3.2.1 Community based approach

Overall the intended project results and outputs have been achieved within the timeframe and financial resources allocated which indicates an efficient implementation of the project. The rural and community based approaches used for awareness raising have been very efficient. This has been documented by the end-line survey which shows that the knowledge level has increased drastically e.g. overweight as risk factor has increased from 32% to 88% among the surveyed population. Place of residence was although significantly associated with the awareness level of diabetes management, with a higher number of people among the rural population able to define “how can the disease be managed” compared to people from semi-urban settings (50.3% vs. 28.4%). This indicates that the community based approach has worked better in a rural setting than in a more semi-urban setting. This could be explained by type of GRCS volunteers selected, competing activities in semi-urban settings, spare time available for diabetes activities etc.

The project has achieved an almost complete coverage among the population in Gardabani District. The actual people reached by the project are equivalent to 54% of the total population, but with the existing strong family structure, this can be regarded as almost a “full coverage” of families in the District. The implemented approach has been successful in raising awareness in a sizable population and among a significant part of the district health personnel. Only to be mentioned that the volunteer approach seems to have had the most effect in rural settings and among the adult population. For the semi-urban settings of Gardabani town and among youth other approaches and youth volunteer groups might have worked more efficient.

> “everybody talks about diabetes now”

> “Before the diabetes project it wasn’t possible to be screened for diabetes. That is possible now”

Quotes from evaluation interviews

#### 3.2.2 Volunteers, training and self-assessment

The project has trained 216 community volunteers and Master Trainers, all individually selected by the GRCS branch team. The Master Trainers were selected among influential and active community members, this being health centre staff, teachers, religious leaders, local authorities but also among common community members. Most of the 216 community

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5 End-line survey report
6 73 general practitioners from 19 PHC units and the referral system
volunteers have been active throughout the project period with an almost zero fall out percentages. They will in the future be an essential resource for the Gardabani Red Cross Branch and their connection with local target area communities.

One disadvantage has been that there are more female volunteers than male (70% to 30%), but more men with diabetes than women, and more men are busy in normal working hours so at times difficult to make a good peer-support match.

The WHO reports: "Diabetes risk can be reduced by moderate weight loss and moderate daily physical activity in persons at high risk. This intervention has been scaled up to the whole population in a small number of high-income countries. However, it is difficult to implement this intervention at scale in low- and middle-income countries, partly because current methods for identifying people at high risk are cumbersome and rather costly”.

This project is an example of how it has been possible to identify people at high risk- via the use of intensive volunteer activities and self-assessment tools. The approaches used for individual diabetes risk self-assessments assisted by volunteers showed that 25% of targeted groups were in the high-risk group. Volunteer education enabled volunteers to guide people in the high-risk group to modify their behavioral risk factors as tobacco use, physical activity, harmful alcohol use and excess salt intake.

Among the referred high-risk group, 11% were clinically diagnosed with diabetes. A locally adapted and specific self-assessment method, followed by a volunteer assisted assessment with high sensitivity and finally a referral for a clinical assessment might have resulting in less referrals and a focused screening. The approach of self-assessment and community mobilisation by volunteers has been a cost-efficient approach screening of high risk persons only and saving of screening resources. Also the detection of people with diabetes might have saved costs, suffering and early death among a sizable group of people.

Volunteer material developed or adapted to Georgian diabetes interventions

7 WHO Global Status Report 2014 p. XIV
Volunteer material has been developed or adapted to the Georgian context and used for the training of volunteers and health professionals. The material for volunteers was in particular found text heavy and not easy to absorb or “digest”. It is also well recognised that in a normal learning curve, regular repetition of the training will ensure that more details are absorbed. It could therefore be relevant to introduce pre- and post-tests for all trainings to document the training effect as well as to do refresher trainings to increase the absorption level from the trainings.

3.2.3 Diabetes service capacity

The project has convincingly strengthened the capacity on diabetes services in Gardabani District. Before the start of the project, there was only one endocrinologist working part-time (2-3 days a week). Now the capacity to and demand for diabetes services has increased drastically and there is now three full-time district endocrinologists working in the hospital and in private clinics. In all the PHU, general practitioners and nurses now have much stronger diabetes knowledge than before the project, due to the specialised training in diabetes provided through the project. There is although still a great quality improvement potential in the medical schools where diabetes diagnoses and care are dealt with for 2-4 hours training at the most.

Focus group discussions with medical staff clearly reported that nurses and doctors now feel much more confident in dealing with people living with diabetes and in referring people at-risk. It was in addition positively noted that nurses have been recognised as an important resource in relation to the provision of diabetes care and that they have played a significant role in this project. Many of whom has also been involved as GRCS volunteers.

The referrals were reported to function much better now and some health care staff reported that they expected a significant decrease in the level of diabetes complications in the future. One concern still remains and relates to the ongoing healthy lifestyle for people with diabetes which depends on continuously access to diabetes monitoring services and medication in a financial fragile health system. A concern that cannot be addressed by the GRCS alone, but will remain an advocacy topic where GRCS and a wider NCD network should be in continuous dialogue with the relevant Ministries and departments.

Recommendations

- All IEC and training materials are very text heavy – the material need to be revised, made in a simpler form with more illustrations and preferably also translated into relevant minority languages
- It would be a good practice to monitor training effect and ensure refresher training e.g. from health department to Master Trainers and from Master Trainers to GRCS volunteers on a six or 12 months basis (only meeting costs to be covered)
- Implementation methodologies should be evaluated and adapted for future behavior change communication approaches e.g. use of peer-group approach, role-models and approaches for youth involvement
3.2.4 Self-support groups

A total of 45 self-support groups have been established, which is a substantial achievement. Out of 1,042 members in total, 804 are people with diabetes and the remaining people are at-risk or family members.

The effect of self-support groups was often confused or intertwined with the effect of general community support from GRCS during the FGD. Directly asked all responses were positive and all agreed that “support groups are good”, “we meet to share information”. It was observed that family members to people with diabetes participated in order to be informed and support their family member in diabetes management.

The impact of the self-help groups has been reported in the end-line survey and is quoted under chapter 3.2.7.

The family involvement and support from family members were observed in all communities visited, and diabetes seems to have become a family identity, more than an individual disease problem. Husbands, wives, daughters and sons were observed as supporters in different FGD. Seeking to modify the diabetes behaviour risk factors does not depend on the individual at risk person only, but even more on the context, the environment and not least on the family support for a change in behaviour. The same goes for family support for a person with diabetes that has to adhere to diet restrictions, secondary prevention methods etc.

The project end-line survey tried to determine the factors that triggered the change of lifestyle among individuals diagnosed with diabetes within the past two years. 34.1% followed advice from healthcare workers and 41.5% of respondents reported that support from GRCS self-support groups helped them to change their lifestyle after being diagnosed with diabetes. An overall positive effect of the self-support groups seems to be that diabetes has in most cases become a family matter, with effect both on a healthy lifestyle, primary diabetes prevention and secondary prevention implementation.

It was reported several times that before there were stigmatisation or self-stigmatisation in relation to having diabetes, but today people are much more open about it. The combined efforts of volunteer support, upskilling of medical staff and establishment of self-support groups can all be contributing factors to the reduction of self-stigmatisation.

“We meet to share information, also what we find on the internet, and family members to people with diabetes participate in order to be informed on how to support their family members”

“All the awareness raising has led to anti-stigmatization in relation to people with diabetes. Now we know everything about diabetes and we can inform the entire community.”

Quote from FGD

It was although the impression that there were no clear support system, set-up and task descriptions for the self-support groups, which seems like an underutilized resource that could be used much more and wider than at the moment.

Recommendation

Self-support groups should be strengthened and supported by volunteers for wider approaches (psychosocial support, access to health services etc.)
3.2.5 Sustainability

Sustainability is concerned with the extent to which project activities can be continued once donor support is withdrawn. Sustainability is often evaluated in three or four dimensions:

1) The impact: the benefit/the social outcome after the program ends

2) The activities: continuation of activities following the end of externally funded program

3) The organization: ability to manage change and transition

4) Sometimes sustainability is also taken to a fourth dimension of public policy level, where GRCS advocacy role to influence on policy level will be discussed under 3.2.6.

1) The stages of changing behaviour traditionally goes from unaware to aware, via concerned to knowledgeable, being motivated to change to actually practicing or trying out behaviour change to finally having a sustained behaviour change. On this project impact level, there is evidence that lives has been saved by the project intervention and that knowledge, changed behaviour and impact will stay in the target population, as they have already practised the benefit of healthy living and have reached the stage of sustained behaviour change. The end-line survey report shows a drastic increase in diabetes knowledge and in changed lifestyle. No fall back to unhealthy living has been reported, only people expressed concerns on continues access to healthy and affordable food items as well as affordable access to health care services. Unfortunately mostly economic concerns that the project cannot solely address.

The sustained behaviour changes have been recognised in target communities and among the healthy living practitioner e.g. GRCS community volunteers and support groups will continue communicating and continuously provide support for a healthy lifestyle with a self-sustaining positive impact.

2) Activities on awareness raising and self-support groups can and will continue among the Red Cross volunteers and beneficiaries based on their own resources and building on the lasting humanitarian commitments among volunteers. On activity level the Red Cross volunteers and the local social networks can continue with existing human resources and with very minimal financial resources as for example branch communication costs. The Georgian Red Cross network involvement will continuously exist regardless of external funding and they will work with the experiences they have gained from this project implementation.

Implementing changes in the Georgian health system can be a concern mainly from a financial perspective. Trained nurses, medical doctors and endocrinologists are ready to use their diabetes knowledge and will continuously use their experiences from this project into their daily practise while financial access to diagnostic consumables (strips etc.) is still a barrier. The referral mechanisms are now in place in Gardabani District, but access to secondary specialist services will depend on the affordability of travel costs and on the existing health system, that again will depend on MOLHSA priorities and funding sources. The major concern in Georgia public health budget has been the recent introduction of a universal insurance which accounts for the major part of the budget, leaving limited funds for equipment and maintenance of clinics as well as training of health care personnel.
Financing of running costs for the mobile unit has in 2016 not found a sustainable solution, and will have a serious negative impact on the availability of screening and diagnostic diabetes services in Gardabani District as well as on secondary prevention services made available at local level through the mobile unit. GRCS and DRC should by all means continue to advocate and apply for financial resources to sustain this life saving activity.

Patient follow-up possibilities after diagnose with diabetes is also a concern (also mentioned by WDF) as it depends on the patient information flow from specialist services back to general practitioners that do not exist at the moment, based on a weak national health information system. Patient follow-up by community volunteers relies on the patient’s acceptance of the self-support group invitation. In the project period 1,468 people has been diagnosed with diabetes in the target area of which 804 (55%) has been registered in self-support groups.

Activities likely to be continued following withdrawal of the project from target areas will be community volunteer awareness raising activities, self-assessment and volunteer assisted diabetes assessment, referrals from existing 19 PHUs in target areas to clinical assessment and self-support groups support for people newly diagnosed with diabetes. Activities that will not be continued without external or MOLHSA funding include mobile preventive outreach primary and secondary diabetes services, updated or expanded volunteer diabetes services in other target areas and a strengthened advocacy network in Georgia.

One way forward on sustaining interventions within Georgian MOLHSA will depend on continuously evidence based documentation, a strong diabetes stakeholder network and their lobby and advocacy work towards decision makers.

3) The GRCS organisational sustainability is high on staff expertise level, but seems limited at project financial level. This project has gained expertise and respect by building on the existing GRCS primary out-patient clinic in Gardabani District and the financial and technical support they continuously receive from the district municipality. This support has been in form of seconded expertise (medical doctors and nurses) and office maintenance costs, support that GRCS Gardabani Branch annually has to apply from Gardabani Municipality. GRCS had timely submitted a financial support proposal to the local municipality, but because of changing heads in the municipality, the approval has not been received for 2016 but will be considered for the 2017 fiscal year only. GRCS has to renegotiate and apply for financial support in every annual budget planning until advocacy efforts have influenced MOLHSA to include the outreach diabetes screening and care service into their minimum package of primary health care services.

Over the past years, the GRCS has enhanced their work toward branch and volunteer development as well as resource mobilisation as the GRCS main priority areas. However, the volunteer retention and capacity development are still challenging for GRCS and require
longer-term efforts (as indicated in the GRCS Branch Development Model, volunteering development policy, GRCS Resource Mobilisation Strategy 2017-2020) and support both financial and technical from partners.

Recommendations

GRCS organizational sustainability needs strengthening in form of volunteer management, volunteer retention and development, branch development and resource mobilization capacities.

GRCS has gained and can sustain a lot of experiences from the diabetes project implementation. Existing diabetes prevention and care material has been developed in cooperation with Georgian Welfare Foundation (WF), Georgian Diabetes and Diagnostic Centre and is an existing resource. As well as the diabetes stakeholder network which has been established as a consequence of this project and the GRCS partnership with MOLHSA and local authorities are as well continuous resources that can be build further on.

GRCS seems motivated and ambitious for further work within the field of diabetes. There are many other areas of relevant interest for GRCS to further expand their work: replicating the existing experiences into other geographical areas; to document the needs and cost-effective approach to diabetes primary and secondary prevention in Georgia based on evidence; working more broadly on NCD prevention and shared risk factors or NCD prevention in particular among children and youth.

Adressing NCD among youth and in urban communities in Georgia are also relevant with a growing urban population (54%9) and a young population below the age of 24 years accounting for 31% of the population, and where primary prevention can still grow into a permanent change in behavior. GRCS has experience with using the IFRC (International Federation of Red Cross and Red Crescent) modules of Healthy Lifestyle Promotion and if combined with the IFRC modules of Youth as Agents for Behavior Change (YABC), this may create a sound background for working with behavior change among young people.

Regarding healthy living for youth and school children, it was mentioned by MOLHSA that a school-health system is currently not implemented and that there is no medical care or staff connected to schools. This was confirmed by The Ministry of Education and Science (MES), i.e. while many NGOs are partnering around non-formal educations, no partners have engaged with the formal education system.

3.2.6 Advocacy

Advocacy is a way of influencing the policy level for example by an informed operational level. The project ambitions were to
- “Bring diabetes high on the national agenda”,
- “District municipality ..to provide financial support for covering running costs” and
- “This low-cost model ... will ideally be a model that the Ministry ... will be able to roll out in other districts of the country”.

Diabetes high on the national agenda

To bring diabetes high on the national agenda is a pressing need but also an expected slow moving process. The project and GRCS have developed a “diabetes prevention and improved health service accessibility” advocacy plan with 4 objectives, relevant activities and specified target groups. With a defined advocacy team with monthly meetings it was hoped that the project could build advocacy capacities at different levels of the project, among stakeholders, national interest partners, local government leadership and media representatives. It was the impression of the review team leader, that the understanding and ambition of advocacy as a tool were not strongly owned by the implementation team and that access to decision makers in MOLHSA had not been easy and still has a long way to develop.

"Diabetes is a priority; screening is important and better than expensive secondary treatment."

Quote from interview with Mr. Valeri Kvaratskhelia, Deputy Minister, Ministry of Labour, Health and Social Affairs of Georgia

The Deputy Minister of MOLHSA although directly asked, mentioned diabetes together with Hepatitis B as the new priorities of the Ministry, and according to WHO, Georgia is in the process to develop an NCD plan. So there are indications that diabetes is coming into the agenda of the health sector but unfortunately not by the efforts of this project that was not known to the Deputy Minister.

As the fourth dimension of sustainability (mentioned above) by influencing the public policy level the approach of advocating and creating a substantial pressure on decision makers is recommended for GRCS to use as an essential approach in their tool box.

Recommendations

- Project modification and replication is strongly recommended, based on existing investment in e.g. NCD prevention and healthy living promotion material and experiences
- Future project direction could/should be adjusted based on lessons learned, donor possibilities and in particular to the RC added value of involvement. This might be with focus on community based and volunteer based approaches with less service delivery focus and equivalent sustainability concerns.
District municipality to provide financial support for covering running costs

A number of meetings have been held with local community members on patients' rights, with local medical doctors to define challenges in relation to availability of quality primary health care services and how to address these, with a cross sectional advocacy team including medical coordinator, local journalists, representatives from Gardabani Municipality and partner organisations to define advocacy needs and topics. As a first time advocacy tool many activities has been implemented, and no doubt with some effect, only that hard evidence of “bringing diabetes on the agenda” and “provide financial support for covering running costs” are hard to present.

Raised awareness and connectedness was signalled by the statement from beneficiary interviews that the project has connected their community with the health service.

“"This project has put our community on the map”
Quote from FGD

Advocacy attempts on the above topic have taken place, but by an unfortunate situation of changes in the financial approval system made no actual financial support for 2016. The Gardabani Branch Director has although close connections to the local Municipality and has managed to get support for many other issues including a special focus on support for Internal Displaced People (IDP). This close collaboration could be a positive entry into next year's financial negotiations, so there might still be hope for achievements in this area.

Low-cost model will ideally be a model for the Ministry

This diabetes prevention model needs to be clearly described and impact documented through the end-line survey for documentation on impact and effectiveness of the partnership between GRCS volunteers and MOLHSA with local municipalities.

When the end-line survey report has been finalised, the consultancy firm “Health Research Union” has signalled the possibility of supporting free of charge the publication in both national and international scientific magazines, which could be a stepping stone for promoting this project approach to MOLHSA and other national stakeholders.

Recommendation

- Work of an advocacy team and on an advocacy plan should be a GRCS overall approach and continue regardless of project funding to achieve long-term result of project investments
- Advocacy on public policy level, strengthening patient organizations or MoU with other relevant stakeholders have the potential for long-term effects and should be tried out as a GRCS sustainability approaches
3.3 **Effectiveness**

Effectiveness is concerned with assessing whether the outputs are delivered in an appropriate manner and quality, and are likely to contribute to the realization of the agreed objectives.

3.3.1 **Surveys**

A baseline and end-line survey has been conducted. The baseline survey helped mostly for knowing the baseline data for the core project indicators, but also to document the challenges toward diabetes knowledge, behaviour of the target population and barriers toward accessing health services. The baseline survey emphasized that knowledge level related to diabetes prevention and around risk factors was extremely low. Knowledge of symptoms and on prevention and treatment methods was low among all regardless of ethnicity, age and gender. Finally barriers to services were predicted in the baseline survey to be difficult to access service with endocrinologist in Gardabani, long quest, and costly transport and difficult to access diabetes medicine.

During the two years of implementation, the project seems to have addressed the concerns of low level of diabetes knowledge, changed behavior, access to improved quality diabetes services while costly transport to access health care service and access to diabetes medicine have not been addressed.

The end-line survey has documented huge impact increase on knowledge and practice about diabetes and health-seeking and health-risk behaviour, physical activity and healthy eating habits. The end-line survey report will hopefully be published in both local and global scientific journals. From this documentation there is no doubt that the objectives of improved primary prevention and detection of diabetes has been reached.

To support the documentation of strengthened secondary prevention of diabetes, the report reads: "The vast majority (93%) of individuals diagnosed with diabetes during the past two years changed their lifestyles (started to eat healthier, losing extra weight and started more exercise). The changed lifestyle among 41% of individuals diagnosed with diabetes during the past two years was triggered by support from GRCS self-support groups". The number of patients seen by diabetes specialists has not been widely shared with the review team only that 92 people with diabetes have been seen by foot specialist.

The diabetes awareness understanding and uptake has been analyzed by different socio-demographic characteristics. No significant differences were revealed between different age groups, a difference was identified between different ethnicities (Azeri 54.5% and Georgian 34.5%) although not significant. But as might have been expected significant differences in diabetes awareness found between respondents’ educational level and also related to respondents family income: "A substantial higher proportion of individuals residing in rural areas could identify all measures of diabetes prevention compared to those who live in urban areas (58.6% vs. 25.0%)"\(^{10}\). Marked differences in diabetes prevention awareness

\(^{10}\) Cited from end-line survey report p. 21
was revealed between rural and urban respondents (57.4% vs. 22.2% respectively), but this association was also statistically not significant.\textsuperscript{11}

3.3.2 Barriers to diabetes services

The high level of poverty in rural Georgia could be the reason that the main barrier that individuals faced after being diagnosed with diabetes (mentioned by 92%) was the cost of healthy food as reported in the end-line survey. This combined with their reported concerns in the baseline survey process of cost for access to medicine is obvious barriers that still need to be addressed in Georgia. Insulin is free of cost for type-1 diabetes patients, but diabetes medicine for type-2 diabetes is not. For retired people and IDP there is a possibility to receive a minor financial salary contribution if their income is less than 1,000 GEL\textsuperscript{12} a month, but there is no additional financial contribution for people with diabetes or any other diseases. On top of this concern are the costs of transport to medicine and diabetes control from rural communities that will add to the out-of-pocket costs. The support for access to health services and medicine is still a challenge for the population of Georgia.

For primary prevention, diabetes screening and detection, the methodologies seem to have been of a quality and approach that has been fully accepted by the target group and has contributed drastically to the realization of the primary prevention objective. To strengthen the secondary prevention both the access to health care services, medical supply, clinical care and healthy living approaches has been reported still to have barriers mainly as a cost concern. Most of the cost concerns might be linked to the national universal insurance schemes, diabetes care service availability and cost of healthy food items.

Recommendation

- This specific diabetes prevention model and approach is most appropriate and/or effective for rural communities and less for urbanized communities. Approaches need to be adjusted to future NCD interventions targeting other beneficiary groups.

Recommendations

- Access to medication and healthy living need further attention e.g. advocating for diabetes medicine on essential medicine list and local adaptation/simplification of diet advices

\textsuperscript{11} Cited from end-line survey report p.22
\textsuperscript{12} 1000 GEL = 383 EUR
3.3.3 Project implementation

The review team was asked to review the effectiveness of implementation of the project across two departments; health and social welfare departments. The project has been fully implemented according to plans see Table 1, activity progress. This combined with information from GRCS management, that in fact health and social welfare is one department, although physically placed in two locations in Tbilisi, has led to our conclusion that implementation modality has been effective and resulted in an improved diabetes prevention, detection and care in Gardabani District, Georgia.

3.3.1 Key Lessons Learned

Among the key lessons learned and good practice that has been identified during this end-line survey and review process should particularly be mentioned:

- It should be early agreed on the impact or end-line indicators that we want and are able to measure and which indicators to apply in order to learn from the intervention. This will be a good practice even as in this case this is not a donor requirement to measure impact indicators. A baseline survey and inception phase where indicators and baseline status are agreed is of key importance for good impact documentation.

- It is good practice to involve the NCD/diabetes patients in the planning process of the intervention, something to include in a possible next planning process. Also all training and IEC material should be pre-tested before used for implementation, as beneficiaries will always contribute with most realistic approaches and implementation plans for a project.

- Use good and multiple communication methods for awareness raising and behaviour change communication in the future as most people absorb most knowledge if communicated via different senses as seeing, listening and self-experiencing.

3.4 Impact

3.4.1 Awareness and knowledge increase

Awareness and knowledge about diabetes in general, diabetes risk factors, symptoms and diabetes complications have improved significantly compared to 2014 and has been documented through the survey findings.

As the end-line survey report has a wealth of information, only selected end-line indicators will be reported here, but all results indicating significant changes on several parameters as knowledge, awareness and practise e.g. in the form of service uptake.

Table 2 – Effect and/or impact measures

<table>
<thead>
<tr>
<th>Focus area</th>
<th>Baseline results</th>
<th>End-line results – for details see the survey reports</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge of diabetes risk factors</td>
<td>17-32%</td>
<td>67-88% depending which risk factor, but knowledge on all parameters are much higher than at baseline survey (see end-line survey for details)</td>
</tr>
</tbody>
</table>
Not only has the project been able to document substantial indicator and impact indicator progress but also other positive and unexpected results have been achieved and reported to the review team, without being directly measured in surveys.

+ Positive attitude towards diabetes patients and reduced self-stigmatizations have been reported more than once. There were no measures intended on self-stigmatization as the aspect was not clearly recognized by the project team in advance of the project planning.

+ Family involvement in diabetes prevention and support has spread a positive effect above expectations, motivating a broader group than the direct affected people living with diabetes.

+ Purposely selection of community leaders and influential persons as Master Trainers and volunteers has gained a positive effect on spreading the awareness and support. With the Master Trainers influential positions in their local community the project has managed to reach further than expected in gaining interest for the topic.

+ Increased GRCS visibility in the district has contributed to increased sustainability of the interventions as GRCS now have volunteer groups in all communities in the targeted district.

+ Local adaptation of intervention methods has made an impact above the expectations, as the project has reached many IDP, the Azeri minority groups (from Azerbaijan), most vulnerable, poor and hard to reach populations and often less mobile elderly groups regardless of the extra efforts this has required, compared to working with a more homogeneous Georgian population.

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<table>
<thead>
<tr>
<th>Known symptoms of diabetes</th>
<th>16-48% depending type of symptoms</th>
<th>46-94% depending type of symptoms, but for all symptoms the knowledge were much higher at the end-line survey</th>
</tr>
</thead>
<tbody>
<tr>
<td>Known complications of diabetes</td>
<td>8-42% depending type of complications</td>
<td>74-93% Depending type of complications, but for all complications the knowledge were significant higher by the project end</td>
</tr>
<tr>
<td>Diabetics knowledge on secondary prevention</td>
<td>16-27%</td>
<td>38-92%</td>
</tr>
<tr>
<td>Awareness about the availability of healthcare services for diabetes patients</td>
<td>13%</td>
<td>62%</td>
</tr>
<tr>
<td>Diabetes prevalence</td>
<td>9.2% diabetes prevalence rate estimated by the project formulation in 2012¹³ Georgia national diabetes prevalence 7.5 % (age 20-79)¹⁴</td>
<td>Diabetes prevalence among study participants was 12% (for people equal to or above 18 years) and about two thirds among them were diagnosed within the past two years¹⁵.</td>
</tr>
<tr>
<td>Cases of diagnosed diabetes Type 2 in Gardabani district</td>
<td>94 people</td>
<td>1468 people</td>
</tr>
<tr>
<td>District endocrinologists</td>
<td>1 person part-time work</td>
<td>3 people</td>
</tr>
</tbody>
</table>

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¹³ IDF Diabetes Atlas 2012- used in WDF application
¹⁴ IDF Diabetes Atlas 2015
¹⁵ End-line survey report
+ The project has contributed towards reducing vulnerability in the target communities not only in relation to NCD vulnerabilities, but also in relation to access to quality health care service in general.
+ The project has strengthened public and volunteer support towards some of the most vulnerable groups, pensions and immigrants, creating a social network in the community contributing to community resilience building.
+ The project approach has benefitted the direct target group, their families but also medical staff, family doctors and nurses regard their technical upskilling as personal incentives and as a motivation factor. An effect above the measurable indicators.
+ Malpractice and self-treatment of diabetes was common and before rural doctors changed medical doses without having training or test possibilities. Today the trained doctors and many patients have changed these malpractices, and the medical service demand has increased.

Among the less positive results could be mentioned:
- The raised expectations, of easy access to diabetes screening outreach services and secondary preventive services provided by specialists, that might be interrupted by project completion and financing of running costs for the mobile unit. This has a negative effect for the target beneficiaries of unfulfilled expectations and interruption of a service they happily have taken up. Only the health service provision is and will continuously be the responsibility of the MOLHSA and local authorities. It has been mentioned that many medical doctors were suspicious of GRCS coming into their field of expertise, but by now they recognize that the project has raised more demand for medical services in general and for diabetes care in specific. Local opinion makers, being involved in this project in different ways need to demand the services to be continued supported by local authorities and at public costs.
- The project has not managed to impact on the sharing of personal medical information between service providers and it is still up to the person living with diabetes to share personal results and information between e.g. endocrinologists and family doctors. The lack of a functioning health information system is a national level matter with impact on the local and individual level.

It can although be said that the positive and unexpected effects have outbalanced the negative effects both in the short and also in the longer perspective.

3.4.2 Management and partnership

The GRCS project staffs have had cooperation in Georgia in particular with Georgian Centre for Disease Control and Public Health and Diabetes Research National Centre and with Welfare Foundation (WF) and not least with Gardabani Municipality.
GRCS staff reports good cooperation with key stakeholders and have held regular round table meetings for creating synergy within the actions of NCD actors, although it was also reported that it has been difficult to engage staff from MOLHSA in the network meetings. IEC materials have been shared in particular with WF and medical staff has been released from duty by MOLHSA for attending the offered trainings, and Gardabani Municipality has seconded medical staff for free to both the Gardabani health cabinet (Red Cross health centre) and to support the project mobile unit.
Technical partnership has by GRCS also been established internally in the Red Cross/Red Crescent Movement with IFRC on NCD material developed together with IFPMA
(International Federation of Pharmaceutical Manufacturers & Associations), saving financial resources on developing good quality training material.

The programme management has rested within the GRCS Health Department under which also the Social Welfare unit reports. The GRCS project team has taken the full ownership of the project and has implemented in line with the project document and partnership guidelines with no concerns.

GRCS has taken a keen interest in working with NCD prevention and care and with this project as a positive experience they have gained a positive reputation within the health and NGO sectors of Georgia as a serious and successful partner on NCDs to local authorities. GRCS has by themselves shown a keen interest in applying for further funding for development of the health and social sector in Georgia, and could be a continues NCD partner for DRC if additional funding sources can be identified.

Recommendation
- GRCS and DRC partnership till 2020 should concretely work together on NCD prevention, strengthen advocacy capacity and results and volunteer diversity (as per agreed Country Strategy)

4 CONCLUSIONS AND RECOMMENDATIONS

4.1 Conclusions

Based on the preliminary end-line survey findings and collected information during the review, it can be concluded that the project has been implemented according to plans set out in the WDF application, all activities has been accounted for and achievements have been measured for all outcome indicators with positive results, all achieving to our expectations and satisfaction.

In the short term perspective, more than 50,000 people has an increased knowledge on diabetes prevention, diagnosis and treatment, 13,600 people has been screened for diabetes and approx. 1,500 people has been diagnosed with diabetes and trained in diabetes-self-management and more than 1,000 people has regular been involved in self-support groups in the project period and target area.

In addition, Gardabani Branch has engaged with Municipality authorities in a fruitful and developing partnership, has mobilized, recruited and trained 216 Red Cross volunteers and almost all district local medical doctors – 73 general practitioners as well as with other local medical and social actors.

On a national level the GRCS Health Department has increased its capacity for NCD and diabetes control programming, engaged in networks with local diabetes actors and has been invited to participate in the government NCD committee.
In a longer term perspective, GRCS is based on this positive experience, eager to replicate the success into other geographical areas, to develop diabetes primary and secondary prevention activities and to engage in NCD advocacy activities more broadly. This combined with the partnership experience between DRC and GRCS, diabetes prevention would be an obvious technical area for further cooperation. Hopefully by the publication of the project end-line survey report, DRC and GRCS will have a good tool for documenting the effect of a national partnership with the Red Cross in the area of diabetes prevention, screening and care. This approach might also be a learning experience that could be used for Red Cross in many other geographical settings.

In the partnership between Georgia and Danish Red Cross a Country strategy has been developed to which both partners have agreed among other things to contribute to:

- GRCS strengthens primary and secondary prevention of NCDs in rural areas
- GRCS should by the end of the current Country Strategy partnership be able to document at least 3 concrete recommendations made to government, policy-makers and local stakeholders, which have influenced policy responses
- GRCS volunteer base increasingly reflects the diversity of the communities in terms of gender, age, disability and ethnicity.

This project has contributed to all of the above mentioned indicators for results to be achieved in the strategy period 2015-2020.

4.2 Recommendations

Based on the findings during the implementation and end-of-project review of this project, the following 15 recommendations will be given grouped into categories of 1) Material and methods, 2) Sustainability 3) Advocacy actions and 4) Future cooperation

Material and methods:
1. All training and IEC materials are very text heavy – the different materials need to be revised, made in a simpler form with more illustrations and preferably also translated into relevant minority languages
2. It would be a good practice to monitor training effect and ensure refresher training e.g. from health department to Master Trainers and from Master Trainers to GRCS volunteers on a 6 or 12 months basis (only meeting costs to be covered)
3. Implementation methodologies should be evaluated and considered for future behaviour change communication approaches e.g. use of peer-group approach, role-models and approaches for youth involvement
4. Self-support groups should be strengthened and supported by volunteers for wider approaches (e.g. to include psychosocial support, access to health services etc.)

Sustainability:
5. Sustainability of the more costly service delivery interventions (mobile unit and outreach services) need to be analyzed, and private business financial support, in-kind support and minimum package exit support should be considered as interim means and until MOLHSA can take the service delivery responsibility strong advocacy means are needed.
6. GRCS organizational sustainability need strengthening in form of both volunteer management, volunteer retention and development, branch development and resource mobilization capacities

**Advocacy actions:**

7. Work of an Advocacy team and on an advocacy plan should be a GRCS overall approach and continue regardless of project funding to achieve long-term result of project investments

8. Advocacy on public policy level, strengthening patient organizations or MoU with other relevant stakeholders have the potential for long-term effects and should be tried out as a GRCS sustainability approaches

9. This diabetes prevention project model needs to be clearly described and impact documented to be used as an advocacy tool in Georgia and for inspiration within the Red Cross/Red Crescent Movement globally

10. There is now a technical sound end-line survey that might be scientifically published and used as an advocacy tool

11. Access to medication and healthy living need further attention e.g. advocating for diabetes medicine on essential medicine list and local adaptation/simplification of diet advices

**Future cooperation:**

12. Project modification and replication is strongly recommended, based on existing investment in e.g. NCD prevention and healthy living promotion material and experiences

13. Future project direction could/should be adjusted based on lessons learned, donor possibilities and in specific to the RC added value. This might be with focus on community based and volunteer based approaches with less service delivery focus and equivalent sustainability concerns.

14. This specific diabetes model and approach is most appropriate and/or effective for rural communities and less for urbanized communities. Approaches need to be adjusted to future NCD interventions targeting other beneficiary groups.

15. GRCS and DRC partnership till 2020 should concretely work together on NCD prevention, strengthen advocacy capacity and results and volunteer diversity (as per agreed Country Strategy)

4.3 **Future collaboration on NCDs**

Based on this successful project implementation and learning experience both GRCS and DRC are motivated to further work within the NCD sector and on diabetes prevention in particular.
One proposed idea from GRCS has been to address the double burden of diabetes and TB although this will not be an area where DRC can contribute much towards TB approaches. Other ideas as earlier mentioned could be:

- Replicating the existing experiences into other geographical areas, as the NCD agenda has not yet been fully convincing and implemented into national strategies and for national authorities

- Scientifically to document the increasing needs and cost-effective approach to diabetes primary and secondary prevention in Georgia, for further advocacy opportunities

- Working broadly on NCD prevention and shared risk factors or NCD prevention in the general population (media campaigns, community based approaches, mainstreaming into other GRCS projects)

- NCD prevention in specific among children and youth. For example in a school-health system that is not well implemented and where currently no partners has engaged with the formal education system.

- Diabetes camps for children could be a relevant intervention for GRCS building on current experiences

- Diabetes education and awareness programs among urban and semi-urban poor would be relevant but also a new model development for the Red Cross/Red Crescent that could benefit many within the Red Cross/Red Crescent Movement on top of contributing to the benefit of vulnerable group in Georgia

- Others NCD approaches could also be considered as strengthening patient-groups organisations, working with parliamentarian groups, caring for volunteers in respect of NCDs

Most important for future cooperation will be to build on the shared NCD interest but also build capacity in GRCS and within DRC, as well as DRCs strategical interest in working with NCDs. The World Diabetes Foundation (WDF) will be an obvious donor, but both partners should actively make surge for other funding opportunities as from Foundations and government donors.
Annexes

Annex 1 Terms of Reference

Terms of Reference for evaluation of Diabetes Prevention Project in Rural Georgia
01 February 2014 – 01 July 2016
Danish Red Cross (DRC), Georgia Red Cross Society (GRCS) and WDF

1. Background
The diabetes prevention project in Georgia started in February 2014 and is implemented in the Gardabani district of Kvemo Kartli region of Georgia. The overall aim of the project is to improve diabetes prevention, detection and care. Primary prevention of diabetes is achieved through training of village level volunteers who conduct awareness raising campaigns in the communities and arrange different events, such as sports competition and school meetings. Detection of diabetes is done through training of local doctors and screening campaigns in villages without health facilities through the project mobile unit. Finally, the project establishes and trains self-support groups for people diagnosed with diabetes or at-risk of diabetes in all target communities. The project operates in Garbadani town and 40 surrounding villages.
The project seeks to address a growing concern of increasing number of cases of diabetes in Georgia. The International Diabetes Federation Diabetes Atlas 2012 estimates that there are more than 300,000 persons with diabetes in Georgia, corresponding to a prevalence rate of 9.2%. However, it is likely that the situation is severely underreported and that many people remain unaware of their status and therefore do not receive the necessary treatment and care to avoid the development of severe complications. In addition the health care system is not equipped to deal with this growing threat. Doctors and nurses have very limited training in diabetes and health facilities are not equipped to perform even basic screening of at-risk patients.
The project aims at building capacities at local level by training community volunteers, establishing self-support groups and developing capacities of doctors and nurses. In addition, the project has an advocacy component to encourage authorities to provide better equipment at the facilities.

Development objective of project:
Improving diabetes prevention, detection and care in Gardabani district, Kvemo Kartli region, Georgia

Immediate objectives:
Improved primary prevention and detection of diabetes
Strengthen secondary prevention of diabetes

2. Objectives of the evaluation
The objectives of the Final Evaluation are:
Assess the relevance, efficiency, effectiveness, impact and sustainability of the project in relation to the objectives (and supporting outputs) set out in the Project Document
Based on the findings of ‘A’, develop a set of key recommendations for future collaboration between Danish Red Cross and the Partner National Society.

3. Output
Contents:
The scope and structure of the report:
The evaluation report will consist of three levels of information:
Firstly, the executive summary to be written in a separate paper providing the bare essentials for
decision-makers regarding the background, major conclusions in relation to the evaluation criteria,
recommendations and lessons learned (total 3-5 pages).
The second level is the main report (max. 25 pages plus a list of abbreviations) of which a substantial
part will be the main conclusions and recommendations. These should be substantiated with more
detailed information only to the extent necessary. Detailed findings should be referred to the
annexes. Conclusions and recommendations in the main report should have references to the relevant
findings in the annexes.
The third level in the report should contain the annexes. Those should provide all information
necessary to substantiate major conclusions and recommendations in the main report. The Terms of
Reference, the team's itinerary, list of persons met, and list of documents used should also be
annexed.

4. Scope of Work
The evaluation shall comprise but not necessarily be limited to the following evaluation criteria:

Relevance
Is there a need to change project implementation and/or direction? Should activities be continued or
terminated based on relevance and cost-effectiveness?

Effectiveness
Assess to what extent project objectives have been reached? Assess the technical quality of the
project activities and the effectiveness and appropriateness of methodologies and approaches applied.
Identify good practise or lack of same in relation to reaching project objectives in a strategic, cost-
efficient approach in line with RC strategies.
Assess the effectiveness of implementation of the project across two departments (health and social
welfare departments)

Efficiency
Assess the efficiency of the project in converting its inputs (funds, expertise, time etc.) to outputs,
with an indication of whether the project has represented good ‘value for money’ given the resources
invested. Could it have been done better, cheaper or quicker?

Sustainability of the project
What activities are likely to be continued following withdrawal of the project from target areas? What
are GRCS future plans for working within the field of diabetes? Focus of potential new DRC/GRCS
diabetes project (primary / secondary prevention)
Assess the extent to which the project has collaborated with national and local authorities and other
partners outside the Red Cross Movement and the results of these collaborations. Special attention
should be given to results of advocacy effort towards national government

Impact
Assess the positive and negative effects of the project in the short and longer perspective? Do
positive effects outweigh negative effects?
How has the project contributed towards reducing vulnerability in the targeted communities?

Management and Partnership
Assess the development of the working relationship between DRC and GRCS throughout the project period including the success of cooperation leading to quality implementation and learning between partners.
Assess if attempts have been made to promote harmonisation with other partners; thereby reducing administrative costs of the project implementation (e.g. aligning with IFRC Healthy Living project).

5. Method of work
The review team will conduct field visits to project areas and meet with all relevant stakeholders in Tbilisi. An agenda for the evaluation has been developed:

<table>
<thead>
<tr>
<th>Day</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>30.05</td>
<td>Presentation by GRCS</td>
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<tr>
<td></td>
<td>Meeting WDF partners</td>
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<td></td>
<td>Meeting MOLHSA</td>
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<tr>
<td>31.05</td>
<td>Field visit:</td>
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<td></td>
<td>Visit to Gardabani Branch</td>
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<td></td>
<td>Meeting with local authorities</td>
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<td></td>
<td>Visit 2 local health facilities</td>
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<td></td>
<td>Meeting with local Red Cross volunteers (2 groups)</td>
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<td></td>
<td>Focus group discussions with beneficiaries (3 FGDs)</td>
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<tr>
<td>02.06</td>
<td>Working on recommendations</td>
</tr>
</tbody>
</table>

Day 1:
30.05

Day 2, 3 & 4
31.05 – 02.06

Day 4
02.06

Day 5
03.06

Presentation to GRCS by evaluation team
Departure

The draft report will be distributed to GRCS for comments and further discussion. After receiving the comments, the review team leader will finalise the report and submit to DRC and the Partner.

6. Time frame
The evaluation will take place from 30.05.2016 till 03.06.2016
The draft evaluation will be delivered the DRC and the Partner by 04.07.2016. The final evaluation report will delivered no later than 10 days after receiving comments from DRC and GRCS and will be submitted to Anne Kobæk, Country Coordinator Georgia/Armenia.

7. Team Composition
Name, background and function of the team members.
Jyte Roswall (Team Leader/DRC HQ Health Advisor)
Astrid Hasselback (DRC HQ/ Desk Officer, Europe)
Anne E. Kobaek (DRC Country Coordinator Georgia/Armenia)

8. Documents available
NS/Partner Strategies
Project document and supporting documents
Updated budget, including expenditures to date
Baseline
Semi-annual donor reports
Other relevant documents to be mentioned here including:
DRC International Strategy 2015-2020
DRC Country Strategy Georgia 2015-2020
Relevant DRC strategic guidelines, including Guidelines on Bilateral Partnerships
Annex 2  Program for visit

Agenda for final evaluation of Diabetes Prevention Project

30th May – 3rd June 2016

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
<th>Responsible</th>
<th>Confirmed</th>
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<tbody>
<tr>
<td>Monday 30th May</td>
<td></td>
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<tr>
<td>10:00 – 12:00</td>
<td>Meeting with project team</td>
<td>Keti/Nino</td>
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<tr>
<td>12:00 – 16:00</td>
<td>Meeting with stakeholders:</td>
<td>Keti/Nino</td>
<td></td>
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<tr>
<td></td>
<td>- MOLHSA (policy level)</td>
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<td>- MoES (policy level)</td>
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<tr>
<td></td>
<td>- Social Welfare organisation</td>
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<tr>
<td>16:00</td>
<td>Wrap up of day with project team</td>
<td>Keti/Nino</td>
<td></td>
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<tr>
<td>Tuesday 31st May</td>
<td></td>
<td></td>
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<tr>
<td>9:30</td>
<td>Departure Tbilisi</td>
<td>Anne</td>
<td></td>
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<tr>
<td>10:30 – 12:30</td>
<td>Meeting with project coordinator and project medical team, Gardabani</td>
<td>Keti/Shorena</td>
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<tr>
<td></td>
<td>Branch</td>
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<tr>
<td>12:30 – 13:30</td>
<td>Lunch</td>
<td>Shorena</td>
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<tr>
<td>13:30 – 17:00</td>
<td>Visit to project area</td>
<td>Keti/Shorena</td>
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<tr>
<td></td>
<td>- Meeting with volunteers (group)</td>
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<td></td>
<td>- Meeting with beneficiaries (FGD)</td>
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<tr>
<td>17:00</td>
<td>Return to Tbilisi</td>
<td>Anne</td>
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<tr>
<td>Wednesday 1st June</td>
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<tr>
<td>09:30</td>
<td>Departure Tbilisi</td>
<td>Keti/Shorena</td>
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<tr>
<td>10:30 – 11:30</td>
<td>Meeting with local authority, Gardabani</td>
<td>Keti/Shorena</td>
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<tr>
<td>11:30 – 17:00</td>
<td>Visit to project area</td>
<td>Keti/Shorena</td>
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<tr>
<td></td>
<td>(lunch included)</td>
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<tr>
<td></td>
<td>- Health facility</td>
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<tr>
<td></td>
<td>- Meeting with volunteers (group)</td>
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<tr>
<td></td>
<td>- Meeting with beneficiaries (FGD)</td>
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<tr>
<td>17:00</td>
<td>Return to Tbilisi</td>
<td>Anne</td>
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<tr>
<td>Thursday 2nd June</td>
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<tr>
<td>09:30</td>
<td>Departure Tbilisi</td>
<td>Anne</td>
<td></td>
</tr>
<tr>
<td>10:30 – 13:00</td>
<td>Visit to project area</td>
<td>Keti/Shorena</td>
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<tr>
<td></td>
<td>- Health facility</td>
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<tr>
<td></td>
<td>- Meeting with beneficiaries (FGD)</td>
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<tr>
<td>13:00 – 14:00</td>
<td>Lunch</td>
<td>Shorena</td>
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<tr>
<td>14:00 – 15:00</td>
<td>Return to Tbilisi</td>
<td>Anne</td>
<td></td>
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<tr>
<td>15:00 – 17:00</td>
<td>Evaluation team working on findings</td>
<td>Anne</td>
<td></td>
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<tr>
<td>Friday 3rd June</td>
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<tr>
<td>10:00 – 12:00</td>
<td>Debriefing</td>
<td>Anne/Keti</td>
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</tr>
<tr>
<td>12:00 – 14:00</td>
<td>Lunch</td>
<td>Keti/Nino</td>
<td></td>
</tr>
<tr>
<td>14:00 – 16:00</td>
<td>Brain storming session on future project</td>
<td>Jytte</td>
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</tr>
<tr>
<td>16:00 – 16:30</td>
<td>Goodbye and thank you 😊</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Annex 3  List of persons met

Mr. Valeri Kvaratskhelia, Deputy Minister, Ministry of Labour, Health and Social Affairs of Georgia
Ms. Ketevan Grigolia, Head of General Education Management and Development Department, Ministry of Education and Science of Georgia
Ms. Tamar Malazonia, Ministry of Education and Science of Georgia

Zviad Machabeli, Deputy Head of Municipality, Gardabani district
Aza Oniani, Head of Health and Social Department, Gardabani district
Ekaterine Uchara – Head of Law and infrastructure, Gardabani district

People meet in Gardabani Branch:
Marina Beria, Endocrinologist, GRCS mobile unit
Nino Betselashvili, Doctor, GRCS mobile unit
Tamar Maisuradze, Nurse, GRCS mobile unit
Nestan – from GRCS Health Clinic
Shorena Tsiklauri, Chairperson of the GRCS Gardabani Branch

Annex 4  List of documents consulted

- Application Form for project Proposal – World Diabetes Foundation and supporting documents
- Updated budget
- Baseline study report (Awareness level of Diabetes Mellitus in Gardabani population 2014)
- Monitoring visit report from WDF September 2014 and May 2016
- Internal reports – 3 monthly throughout the project period
- Project Progress Reports (PPRs) 2014 and 2015
- DRC International Strategy 2015-2020
- DRC Country Strategy Georgia 2015-2020
- Plan of advocacy work in the frame of Diabetes prevention in rural Georgia
Annex 5  De-briefing note / presentation

Debriefing

Diabetes prevention in rural Georgia
2014-2016
Georgia Red Cross Society (Danish Red Cross and WDF)

Project details

Goal:
Improved diabetes prevention, detection and care in Gardabani district in Kvemo Kartli region, Georgia

Objectives:
1. Improved primary prevention and detection of diabetes
2. Strengthen secondary prevention of diabetes

29 months (2014-2016) worth 449,555 Euro

Terms of Reference

1. Assess relevance, effectiveness, efficiency, impact, sustainability and management and partnership
2. Recommendations for future collaboration in this area of interventions

Evaluation criteria

Relevance

Relevance refers to the extent to which the intervention is suited to a key problem and situation in Georgia, to the priorities and policies of the IRCIS, Georgia (as a country), and strategies within the Red Cross/Red Crescent and Danish Red Cross:

- Awareness raising important for all, youth and in specific for approx. 25% of diabetes high-risk population
- Diabetes prevalence rate (proportion of a population that has the condition) in Georgia estimated 9.2% but in reality expected higher as detection has been almost inaccessible till today
- Very relevant to document incidence and prevalence of diabetes and be able to advocate and promote NCD prevention policy, diabetes action plan, healthy lifestyle promotion etc. which do not exist in Georgia (2014 country profile)
- Relevant to work on understanding and preventing NCD shared risk factors
- Premature death in age between 30-70 years = 22% due to the 4 NCDs
Efficiency

Efficiency refers to how economically the resources and inputs (financial and human) have been converted into results and outputs (batter, cheaper, quicker?).

- Overall all intended project results/outputs has been achieved within timeframe.
- Almost 100% district coverage of awareness raising (except district main towns) – rural/community based approach (result 2) has been an efficient approach.
- Cost-efficient approach by Diabetes risk assessment form and screening of high risk persons only (result 3).
- Effect of self-support group were not widely reported, but family involvement and support from family members were well documented (diabetes became a family identity) (result 5).
- National capacity on diabetic services has increased drastically in Giardasi district (access to endocrinologist, secondary and tertiary specialist services, family doctors and diabetic care among nurses) (result 7).

Effectiveness

Effectiveness is concerned with assessing whether the outputs are delivered in an appropriate manner and quality, and are likely to contribute to the realization of the agreed objectives.

Primary prevention and detection

- The interventions has shown to be very effective in rural communities, among both women and men and among different ethnicities.
- Cost effectiveness for primary prevention and detection has shown to be very cost effective (calculations is missing).

Strengthen secondary prevention

- Diabetic self-management were reported to be very difficult because of costly access to medication and good diet (result 4).
- Exit strategy and sustainability of service delivery interventions can be a concern.

Impact

Do the positive effects outweigh negative effects?

Unexpected results.

- Positive attitude towards diabetic patients and reduced self-stigmatisations has been reported.
- Family involvement in diabetic support have spread a positive effect above expectations.
- Purposefully selection of master trainers have gained a positive effect on spreading the awareness and support, HIC visibility and on sustainability of interventions.
- Adaptation of intervention methods and impact to minority groups (Azeit) can have other positive effects.
- Medical staff (family doctors and nurses) regard the technical upgrading as a personal incentive and as a motivation factor.

Impact

Has the project contributed towards reducing vulnerability in the target communities?

- Strengthened public and volunteer support towards some of the most vulnerable groups: pensioners and immigrants.
- Strengthened quality health service to underserved communities (GRCS has put our community on the map).
- Family and community resilience strengthened.

Project results/Indicators

<table>
<thead>
<tr>
<th>Focus Area</th>
<th>Indicator</th>
<th>Define</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge of cause of diabetes</td>
<td>12.7% do not know 4-28% of women and 12-27% of men do not know any symptoms of diabetes</td>
<td></td>
</tr>
<tr>
<td>Knowledge of symptoms for diabetes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attitude and Behaviour</td>
<td>Tobacco consumption 18.30% vs alcohol 87% do not do physical exercise</td>
<td></td>
</tr>
</tbody>
</table>

Sustainability

Sustainability is concerned with the extent to which programme/project activities can be continued once donor support is withdrawn.

- Impacts: the benefit / the social outcome after the programme ends.
- The activities: continuation of activities following the end of externally funded programme.
- The organization: ability to manage change and transition.

Sustainability

- GRCS seems motivated and ambitious for future work within the field of diabetes. Proposal to adress the dobol burden of Diabetes and TB.
- Existing material has been developed in cooperation with SWF, NCDC for local adaptation and is an existing resource.
Management and Partnership

Working relationship DRC and GRCS (cooperation and learning between partners)
- Project implementation between two departments (health and social welfare) - but no evidence of the contribution from social welfare??

Hermonisation with other partners?
- Material on NCD prevention form IFRC/CCFHA material has been translated into Georgian, could be useful for a NCD partnership in the future

Key lessons learned

- We should agree on the indicators that we want to measure and which indicators to apply in order to learn from the intervention.
- It is good practice to involve the NCD/DM patients in the planning process of the intervention, something to include in a possible next planning process.
- Use good and multiple communication methods for awareness raising and BCC in the future

Recommendations

1. Project direction could/should be adjusted based on lessons learned, donor possibilities and in specific to the RC added value. This might be with focus on community based and volunteer based approaches with less service delivery focus and equivalent sustainability concerns.
2. The NCD model and approach most appropriate for rural communities and less for urbanised communities and less as a healthy lifestyle approach among youth. Approaches need to be adjusted to future NCD interventions.
3. Support for access to medication and local health living need further attention e.g. advocating for diabetic medicine on essential medicine list and local adaptation/simplification of diet advice.

4. Self-support groups should be structured and supported by volunteers for wider approach (psychosocial support, access to health services etc.)
5. Exit strategy and sustainability of service delivery interventions needs to be analyzed. Private business, in-kind support and minimum package exit support should be considered.
6. Advocacy, patient organizations and MoH should all be tried out as sustainability approaches

7. Organisational sustainability need strengthening in form of both volunteer management, volunteer retention and development, branch development and resource mobilisation capacities
8. Project modification and replication is strongly recommended, based on existing investment in e.g. NCD prevention and healthy living promotion material and experiences
9. There is potential for a technical sound endline survey, that might be scientifically published and used as an advocacy tool.
10. All material is very text heavy – material need to be revised in a simpler form with more illustrations and preferably also translated into relevant minority languages

11. Work of the Advocacy team and on advocacy plan should be a GRCS overall approach and plan and continue regardless of project funding to achieve long-term result of project investments
12. It would be a good practice to monitor training effect and ensure refresher training e.g. from health department to master instructors and from master instructors to GRCS volunteers e.g. on a 6 or 12 months basis (only meeting costs)

13. Implementation methodologies should be evaluated and strongly considered for future behaviour change communication e.g. use of peer-group approach, role-models and approaches for youth involvement
Annex 6  Interview guide example

Interview guide for FGD (medical staff, clients, support-groups)

<table>
<thead>
<tr>
<th>Interviewed Group description</th>
<th>Location</th>
<th>Number of participants</th>
<th>Gender balance</th>
<th>Diversity (disability, ethnicity, age groups, others)</th>
<th>As target group (medical staff, clients, support-groups)</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Topic -</th>
<th>Question</th>
<th>Probe</th>
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</thead>
</table>
| 1. Training and service provided | 1.1 Can you explain the training or service you have received from GRCS or health authorities around diabetes? | - Topics  
- Length  
- quality  
- More attention  
- Understand importance of secondary prevention  
- Self-help groups  
- Cooking-classes  
- Walk-and-talk clubs |
|  | 1.2 How did the training help you in your daily work and living? | |
| 2. Access to services | 2.1 Do you have any benefit or problems around the diabetes training and services? | - Access problems,  
- cost, quality,  
- behavior of staff,  
- frequency  
- focus on diabetes, more or less diabetic patients?  
- frequency of access to services and visits |
|  | 2.2 Explain any changes that has happened around the medical facility or the mobile unit over the last 2 years | - Sustainability,  
- relying on GRCS, MOLHSA  
- advocacy |
|  | 2.3 What will happen in the future around diabetes in the area? | |
| 3. Changes (impact) | 3.1 Has any important changed happened in the families, home, or community during the last 2 years? Please explain what has changed (attributing factors) | - Economic changes  
- Social changes  
- Family changes |
|  | 3.2 Has anything changed for yourself? Please explain | - Self-responsibility  
- Upgraded knowledge |