

**REPORT OF THE FIFTEENTH MEETING OF THE
WHO ALLIANCE FOR
THE ELIMINATION OF BLINDING
TRACHOMA BY 2020**

Geneva, 18-20 April 2011

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ABBREVIATIONS

| | |
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| AFE | Antibiotic treatment, facial cleanliness and environmental improvement |
| AIO | Annual intervention objective |
| CBM | Christoffel Blindenmission |
| CDD | Community Directed Distribution |
| GET 2020 | WHO Alliance for the Global Elimination of Blinding Trachoma by the Year 2020 |
| GHO | Global Health Observatory |
| IAPB | International Agency for the Prevention of Blindness |
| ICTC | International Coalition for Trachoma Control |
| ITI | International Trachoma Initiative |
| LCIF | Lions Clubs International Foundation |
| MDA | Mass drug administration |
| MDG | Millennium Development Goal |
| NGO | Nongovernmental organization |
| NTD | Neglected Tropical Diseases |
| PAHO | Pan American Health Organization |
| PCT | Preventive chemotherapy and transmission control |
| SAFE | Eyelid surgery, antibiotic treatment, facial cleanliness and environmental improvement |
| TF | Trachoma follicular |
| TT | Trachomatous trichiasis |
| UIG | Ultimate intervention goal |
| WHO | World Health Organization |

• Introduction

The Fifteenth Meeting of the WHO Alliance for the Global Elimination of Blinding Trachoma by the Year 2020 (GET 2020) was held at the International Conference Centre, Geneva, Switzerland, from 18 to 20 April 2011.

The objectives of the meeting were to carry out the Alliance's annual review of progress towards global elimination of trachoma, to review the implementation of the SAFE strategy, to provide an update on the Neglected Tropical Diseases (NTD) framework, to review and report on a number of meetings and activities, and to present the advocacy document on the global elimination of trachoma by 2020. A description of the "Scope and purpose" of the meeting is attached as Annex 1.

The meeting was attended by 88 participants, making this the largest and most representative meeting of the GET 2020 to date. Participants included 43 national coordinators for trachoma control. A full list of participants is attached as Annex 2.

Dr Boubacar Sarr of Senegal was elected Chair of the meeting and Mr Martin Kollmann (CBM) was elected Vice-Chair. Participants then introduced themselves in turn. A number of administrative announcements were made and the main elements of the agenda were highlighted. Mr Karim Bengraine (LCIF) and Dr. Bernadetha Shilio (United Rep. of Tanzania) were elected rapporteurs.

Dr Ala Alwan, Assistant Director-General of the World Health Organization (WHO), responsible for Noncommunicable Diseases and Mental Health, welcomed participants on behalf of the WHO Director-General. Dr Alwan stressed the importance of the Alliance in combating trachoma worldwide and particularly highlighted the significance of surgical care in saving sight. He emphasized the need to establish links at national level with national services that provide these services, and to seek for synergies with other disease intervention efforts. Dr Alwan said it was rewarding to see a growing number of organizations working with WHO against blinding trachoma. The World Health Assembly has passed resolutions on blindness in the past and it is encouraging now to have milestones and targets for the Action Plan against avoidable blindness. He encouraged the Alliance to keep focused on its task and to multiply its efforts because through the Alliance's work the elimination of trachoma by 2020 is achievable.

On behalf of Dr Hiroki Nakatani, Assistant Director-General of WHO, responsible for HIV/AIDS, Tuberculosis, Malaria and Neglected Tropical Diseases, Dr Lorenzo Savioli also welcomed participants. He pointed out that trachoma is now an integral part of the global strategy for the control of Neglected Tropical Diseases (NTDs), in which trachoma is one of 17 NTDs. Preventive chemotherapy is one of the important components of the NTD strategy, but for trachoma this has to be seen as part of the integrated SAFE strategy that includes prevention and treatment components.

• **Report from the WHO Secretariat**

Dr Silvio Paolo Mariotti, Medical Officer, GET 2020 Secretary, World Health Organization, Geneva, Switzerland

Dr Mariotti began the report by expressing thanks to the large number of participants attending the meeting. He said there were 88 participants present and it was very gratifying to see so many people taking part. Tracing the history of GET 2020, he showed how attendance at the annual Alliance meetings had steadily risen from 39 (including four country representatives and 17 representatives of NGOs/interested parties) in the first GET 2020 meeting in 1996 to 88 participants (including 43 out of 57 suspected endemic country representatives and 45 representatives of NGOs/interested parties) in 2011. In particular, there had been a steady increase over the past six years (though attendance in 2010 was down from the general trend due to travel difficulties caused by the volcanic eruption in Iceland).

Trachoma monitoring forms

Trachoma monitoring forms are the WHO GET2020 tool to monitor progress towards ultimate intervention goals (UIGs) and annual intervention objectives (AIOs) at national and global levels. With full integration of trachoma into the global NTD framework, data at district level are crucial for operational decisions and monitoring. Thus, timely completion of the forms and the involvement of implementing partners are essential so that complete and consistent information can be provided. Trachoma monitoring forms are being received from a growing number of countries. Forty-two out of 44 forms have been received in 2011, of which most have been received in good time. An increasing amount of data is now becoming available on the basis of surveys which was a great improvement on the situation of several years ago when most data were based on estimates. Data are cross-checked with other implementing partners such as the International Trachoma Initiative (ITI) that share their programme data with WHO.

Dr Mariotti reminded participants of the elimination targets of various countries. Ghana, Iran, Morocco and Oman have already achieved elimination; 34 countries have target dates ranging through to 2020. Of these eight countries have target dates in the years up to 2014, 14 countries have 2015 as their target date, one has 2018 as its target date, and 11 have chosen 2020 as their target for elimination (though four of these are not confirmed). Twenty-six countries have endemic trachoma in more than 10% of districts, 15 countries have it in more than 30% of districts, and four countries still have endemic trachoma in more than 50% of their districts. Data on the coverage of districts with AIOs for surgery showed that 20 countries were past the 50% mark, and that five countries had reached 100%. Coverage of AIOs for antibiotics was over 80% (the target) in 15 countries, and coverage of AIOs for facial cleanliness was past the 80% target in 17 countries.

A review of the trachoma monitoring forms showed that targets for the provision of antibiotics are more likely to be achieved than targets for surgery, which takes longer. Many countries now include trachoma prevention in their national planning, though there is concern that AIOs should include targets that are achievable, and planned interventions are more realistic than in the past. Political support has increased since trachoma control was integrated into the NTD framework. However, some challenges remain. Not all countries have baseline data and have therefore not received the donation of azithromycin since they do not have the data available to do planning. Also, while data sharing at national and international levels has improved considerably, and there is an increased amount of data on district-level coverage, data sharing has still not been fully achieved. Additionally, the extent of government investment in national programmes remains variable.

Recent events

Dr Mariotti informed participants of a number of recent events and activities, namely:

- The 3rd Global Scientific Meeting on Trachoma was held in Baltimore in July 2010.
- Surveillance plans were developed in Ghana and Mali.
- China committed itself to trachoma elimination with a target date of 2016.
- Major bilateral donors included SAFE as the strategy for trachoma.
- The Pan American Health Organization (PAHO) started planning for the elimination of trachoma in the Americas region in 2010.
- In the Pacific islands, partners began working for the elimination of trachoma.
- The WHO-NTD roadmap is being developed, with tools for funding gap analysis and monitoring and evaluation.
- The web page of the WHO programme on the Prevention of Blindness and Deafness (PBD) has been revised and would be updated in the coming month.

Recommendations from the 14th meeting of GET 2020

Dr Mariotti reviewed the 10 recommendations from the 14th meeting of GET 2020 in 2010. Most of those requiring action from the Secretariat had been dealt with.

Discussion

It was pointed out by participants that trachoma control is much more than chemotherapy and that it would be useful to know the epidemiological situation for the SAFE strategy as a whole. Dr Mariotti said that the Secretariat had been requested to update the data on SAFE and was doing so. However, staff resources were limited so everything could not be done at once. The next step was to update the global epidemiological data on trachoma in order to enable WHO and the Alliance to make more accurate assessments.

Concern was expressed at the fact that coverage with antibiotics and surgery seemed to have declined since 2009. It was explained that this was not simply a problem at national level but at village level. Countries do not always have the latest figures, and the figures supplied to WHO by countries often do not match those provided to WHO by Alliance partners. The Secretariat therefore had to do a lot of checking in order to establish the real situation. The apparent decrease in surgery was possibly due to better data becoming available and to the increase in preventive efforts in recent years.

Participants requested that they should receive copies of all the presentations given during the meeting, and this was agreed subject to the presenters giving their permission. There was also a request that the report of the previous meeting should be made available to Alliance members before the start of the next one. This had not been possible in the case of the report of the 14th GET 2020 due to a problem with a link on the Alliance web site. However, Alliance members were informed that the report of the 15th GET 2020 would be available within eight weeks of the end of the meeting.

- **Integrated control of neglected tropical diseases**

Dr Aya Yajima and Mr Alexei Mikhailov, Department of Control of Neglected Tropical Diseases, World Health Organization

Dr Aya Yajima and Mr Alexei Mikhailov described some of the challenges in the area of control of NTDs. For instance, there are limited resources both in the Ministry of Health and in donors and partners, there is increasing competition for funding with other health programmes (or even with other countries), many vertical disease programmes operate individually, and partners operate through a variety of activities in different locations and at different times (and sometimes for different goals).

Despite these challenges, the NTD mission is to make sure that treatments reach everyone whoneeds them. Target areas, populations, interventions and even drugs are the same – or at least overlap – across vertical programmes. Thus, integration of the vertical disease control programmes into one national NTD control programme is becoming a necessity both in order to increase cost-efficiency and to accelerate scale-up. Within the NTD framework, the Ministry of Health leads the national NTD programme in setting national goals, identifying the actions that can be integrated, coordinating who does what (and where), and identifying the gaps. Donors and partners support the ministry by filling those gaps. Not all aspects of different programmes can be integrated but some – such as training, advocacy, social mobilization, mapping and programme coordination – can be integrated since all programmes do them.

The NTD strategy has three stages: development of a multi-year national plan of action, a funding gap analysis, and the implementation (“filling the gaps”). At the first stage, the national action plan

and budget plan are developed for the coming five years, using a situation analysis that reviews all available knowledge on the epidemiological situation of all endemic NTDs as well as on ongoing control activities within the country. This shows not only where the presence of different NTDs overlaps geographically but also which partner is doing what in the different areas. This leads to the identification of “integration opportunities” between NTDs and between health and other sectors (such as water and sanitation).

A standard tool has been developed for funding gap analysis which enables a costing of what a national NTD programme wants to achieve, defines the contributions of government, donors and other partners, and identifies the financial gap that needs to be filled in order to achieve the programme objectives.

For the roll-out of the NTD “package”, tools available include a databank dedicated to preventive chemotherapy and transmission control (PCT), a set of country profiles, a guide for developing a national plan of action for integrated NTD control, a PCT platform for information-sharing, a tool for funding gap analysis, and a set of manuals on preventive chemotherapy, deworming, and monitoring and evaluation. Preventive chemotherapy is needed in some 130 countries worldwide, of which 45 have NTD plans of action that are under development or finalized, 14 are using the funding gap analysis tool, and 28 have identified donors.

The speakers described the structure of the PCT databank which includes epidemiological data, implementation data and metadata on five diseases (lymphatic filariasis, soil-transmitted helminthiasis, schistosomiasis, onchocerciasis and trachoma). The recommended pathway for data flow is from peripheral (household, community) treatment records to the completion of a data compilation form at sub-district level after every round of treatment, to a district summary compiled after every treatment, to a national summary that is submitted to WHO annually.

Trachoma data in the PST databank include maps by district for 44 endemic countries of trachoma follicular (TF) for those aged 1–9 years and trachomatous trichiasis (TT) for all ages. The PCT country profiles are being updated with trachoma data, and a specific module for trachoma data has been created (with both internal and web-based access).

The speakers also described the WHO Global Health Observatory (GHO) which is being developed as a central repository where WHO departments and programmes can upload and present data. The GHO contains data on six selected NTDs, namely Buruli ulcer, human African trypanosomiasis, leprosy, dracunculiasis, lymphatic filariasis and trachoma. From the thematic page in the GHO users can go deeper to the raw data and it is possible to do interactive reporting with maps and tables. The GHO is still under development.

A roadmap for NTDs was launched in October 2010, and in April 2011 the Scientific and Technical Advisory Group for NTDs endorsed it with specific deadlines and targets.

Discussion

The view was expressed that NTD programme implementation should not wait until all data are available. Rather, countries were encouraged to begin and to build up their data gradually as a part of implementation. Asked when the PCT databank would be up and running, Mr Alexei Mikhailov responded that it was already operational but that there is a time lag for clearance of data by the WHO statistics team.

The increased availability and accessibility of data was welcomed by participants. It was suggested that data could be used not only to show progress against targets but also against need. There was general support for the integration of trachoma with the global NTD framework – especially in the areas of surveys and information gathering.

• Report of the third Global Scientific Meeting on trachoma

Presented by Dr Silvio Paolo Mariotti, WHO, on behalf of Professor Sheila West, El Maghraby Professor of Preventive Ophthalmology, Johns Hopkins Hospital, Baltimore, MD, USA

The third Global Scientific Meeting on trachoma was held in Baltimore from 19 to 21 July 2010. As more and more countries were coming close to achieving their UIGs for trachoma and trichiasis, yet barriers existed to carrying out some guidelines relevant to trachoma control, the GET2020 meeting in 2009 had advised that new evidence from research should be reviewed so that previous recommendations could be updated, refined and clarified. The goal of the third Global Scientific Meeting was therefore to review current recommendations and treatment directives for mass drug administration (MDA) and targeted treatment, and to clarify previous recommendations on the certification of elimination of blinding trachoma, considering each component of the SAFE strategy.

As a guide for monitoring, the meeting defined population groupings as follows:

- *district*: the administrative unit for health care management, defined as a population unit of 100 000–250 000 persons;
- *subdistrict*: a geographic (or other grouping) of at least three villages that permits finer stratification of a district into subunits that might be expected to have greater or lesser prevalence of trachoma;
- *village*: a population unit of 8000–10 000 persons;
- *community*: a defined group of households, a village, or a group of neighbouring villages, for which mass trachoma control activities can be implemented (a community may be as large as a subdistrict or smaller than a village).

Members of the Global Scientific Meeting concluded that (in a clarification of the recommendation and not a change) if active TF is greater than 10% in 1–9-year-olds at baseline, it is not necessary to

re-survey as a guide for programme decisions before at least three years of implementation of antibiotic treatment, facial cleanliness and environmental improvement (AFE). Further, in new guidance based on a review of many programmes, the Global Scientific Meeting stated that in districts where the baseline prevalence is high (at least 30%) it is not necessary to do outcome surveys before five years of AFE implementation. National programmes should aim for 100% coverage with AFE interventions and should plan for sufficient antibiotic supply during the year of the outcome survey in order not to have an interruption of treatment if MDA is still warranted.

In relation to survey methodology, the Global Scientific Meeting concluded that for new countries or areas starting a programme, population-based data are necessary for planning and that, while district-level data is the gold standard, village-level data can be used if they are not extrapolated to represent the prevalence of an entire district. Further, it was recommended that data from larger geographical areas (e.g. regions) can be used to start a programme so long as they show that trachoma is widespread and highly endemic and that, if the estimate of TF for the large area is less than 10% in 1–9-year-olds, district-level data must be obtained before starting. The meeting also recommended that outcome (impact) surveys must be conducted at the district level, and not at larger aggregates, and that outcome surveys may be used to pronounce achievement of UIGs for TF if the sample size is powered to calculate estimates at the subdistrict level.

When looking at the TF indicator for elimination, the Global Scientific Meeting decided that:

- If district-level prevalence of TF is greater than 10% in 1–9-year-olds, divide the district into subdistricts based on geographic groupings, groupings by baseline “hot spots”, and groupings by presence or absence of infrastructure, and then re-survey these subdistricts.
- If subdistrict prevalence of TF is greater than 10% in 1–9-year-olds, use MDA for subdistrict plus facial cleanliness and environmental improvement (F and E) for at least three years.
- If subdistrict prevalence of TF is between 9% and 5% in 1–9-year-olds, use targeted treatment for subdistrict villages plus F and E (where “targeted” means use best available data but no further survey is needed in that subdistrict).
- If subdistrict prevalence of TF is less than 5% in 1–9-year-olds, no further antibiotic is needed, but F and E can be continued.

The TT indicator for elimination was defined as follows:

- at district level, less than 1 trichiasis case unknown to the health system per 1000 total population (where “known” cases are recurrent cases, refusals, listed though not yet operated but with a surgical date set; and “unknown” cases are those unknown to the health system);
- evidence that the health system has a method in place to identify incident cases and manage them with a defined strategy (i.e. surgery);
- evidence for surgical audit, aiming for a recurrence rate of less than 10% at one year.

In the TT indicator, the term “unknown” replaces “unoperated” in the previous recommendation. In other words, in addition to all cases known to the health system at the time of elimination, these “unknown” cases are those that subsequently come to light. “Unoperated” was replaced because it included persons who refused operation and persons with trichiasis who could not honestly be offered the restoration of their sight through surgery.

Discussion

Discussion included questions about whether programmes should report cases who refuse surgery as well as genuinely unknown cases, and whether the recommendations were approved by WHO. It was recommended that programmes should report the number of persons offered surgery and those accepting it. There was a need to share good practices in this respect as there were many reasons for refusal. While the recommendation came from the Global Scientific Meeting and not from WHO as such, no obstacle was anticipated to WHO adopting the recommendation.

The rate of one per 1000 had been fixed by the Global Scientific Meeting as the maximum number of persons a public health programme could accept as excluded from care because they were unknown (i.e. all other patients either would have been treated or would have refused treatment). By the time that elimination is achieved, the national eye care programme should be taking care of cases that emerge. The rate of one unknown case per 1000 represents a balance of ethics and feasibility.

The issue of epilation of eyelids was also raised though the Global Scientific Meeting had not discussed this issue. It was agreed that persons who epilate their eyelids due to trachoma should be offered surgery.

• Report of the Trachoma Scientific Informal Workshop

Dr Paul Emerson, Director Trachoma Control Programme, The Carter Center, Atlanta, GA, USA

The Trachoma Scientific Informal Workshop was held on 15 April 2011. Twenty-two participants from 14 different organizations attended and seven presentations were made.

A randomized controlled trial was presented on the use of absorbable polyglactan-910 sutures versus silk sutures for surgical treatment of trichomatous trichiasis in Ethiopia. The study of 1300 patients with trichiasis compared the use of absorbable sutures versus silk ones for TT surgery. Half the patients were randomized to absorbable sutures and half to silk. The study showed that there was no difference in recurrence of TT (one or more lashes) at 12-month follow-up and that absorbable sutures were associated with 30% fewer granulomas. It was concluded that programmes may consider using either silk or absorbable sutures. The absorbable sutures were marginally more expensive than silk, but may provide an operational advantage in terms of time taken for follow-up (there was zero risk of not having the sutures removed).

A further study on surgery versus epilation for the treatment of minor trichiasis also took place in Ethiopia. Though the study findings were not conclusive, surgery appeared to offer better long-term outcomes for vision. Many TT patients were already epilating and were provided with high-quality forceps to use rather than local ones. It was concluded that epilation could not be recommended as an alternative to surgery, but that it may be an option for persons who refuse surgery or who have recurrent problems after surgery.

A longitudinal study of visual disability and impairment in patients with operated and unoperated TT in Oman was also described. The study found that successfully operated patients were less likely to have developed visual disability or impairment than unoperated or recurrent patients, thus providing additional good evidence that TT surgery can save sight.

All three of the surgery studies underlined the fact that management of TT patients remains critical to the success of trachoma control programmes. There was consensus at the meeting that there is a need for an expert meeting on the management of TT patients which would review surgical techniques and epilation and reconsider other management methods such as electrolysis.

Experience in support of trachoma MDA coverage surveys in Plateau State, Nigeria, was also described. The first MDA with azithromycin in Plateau State was implemented using the existing system of Community Directed Distribution (CDD). Population coverage was assessed two months after distribution and it was found that coverage in the CDD areas was good (around 75%), but was lower than reported overall since not all villages were in the CDD system. Missed villages were identified and this allowed for a “catch-up” round of MDA. The presentation served as a reminder that field reports do not always reflect true coverage and that programmes should consider conducting periodic population-based coverage surveys.

A further study addressed the application of the new impact assessment recommendations from the GSM in South Wollo. The new recommendations were followed for impact surveys in 36 subdistricts of 13 districts of Ethiopia after three-and-a-half years of SAFE, including three rounds of MDA. Some districts and subdistricts had less than 5% TF, indicating that F and E should continue but that MDA could be stopped.

In a study in Northern Cameroon the absence of water was associated with the highest rates of trachoma. It was found that rural villages without water that were classified as “poor” were rich in wealth from livestock which could be mobilized by the communities themselves to pay for their water needs.

The workshop also heard a presentation on the role of non-chlamydial bacterial pathogens in a low-prevalence setting.

Discussion

Several participants expressed support for the use of epilation as “better than nothing” for patients who refuse surgery. However, it was noted that while epilation removes the discomfort it does not cure the disease. For the patients in the study reported at the workshop, epilation was a second-line option and not a substitute for surgery. It was also pointed out that when epilating lashes grow they

are sharp and may cause more damage. It was also stressed that the design of the forceps in the study was important since they did not break the lashes as the local forceps sometimes did.

Participants also raised the issue of persons who do not come for surgery despite health education about the benefits of surgery for trachoma patients. It was mentioned that in Sudan, with a backlog of TT cases but with patients preferring not to have surgery, it had been decided to implement an epilation technique to help them.

- **Report of the International Coalition for Trachoma Control**

Mr Chad MacArthur, Director of Neglected Tropical Disease Control, Helen Keller International, New York, NY, USA

The International Coalition for Trachoma Control (ICTC) is a coalition of organizations committed to the elimination of trachoma and who bring different strengths to this effort. These include foundations, NGOs, research institutions and industry. With reference to the recommendation on essential data collection from the 14th GET 2020 meeting, ICTC supports country programmes to complete the trachoma data forms so that all data are captured and not double-counted. With regard to the recommendation on the need for trachoma action plans, ICTC member organizations will develop a format for such action plans, and in response to the recommendation on updated global epidemiological estimates ICTC is working with the London School of Hygiene and Tropical Medicines on a global trachoma atlas.

To assist national trachoma task forces to track district-by-district progress towards the elimination of trachoma, ICTC is mapping NGO activities by gathering information according to the elements of the SAFE strategy. Thus, for surgery, the number of TT operators trained or retrained and the number of persons (and specifically the number of women) who have undergone operations are being collected, and, for antibiotics, the number of people receiving Zithromax® and the number of tubes of tetracycline distributed.

For face-washing through school health programmes, numbers of students reached and teachers trained are being collected. For promotion of face-washing through rural radio broadcasts, the number of radio stations broadcasting is being compiled, while for community-level behaviour change the number of community sessions held is being counted. For environmental change, ICTC is compiling statistics on numbers of latrines constructed and of water sources installed or improved.

There is currently no indicator that is systematically collected on the quality of surgery and recurrence of disease, and most countries are not measuring or reporting them. Although the number of surgeons certified was proposed as an indicator, surgeons who have not operated for two years should not be considered certified. A column is being added to data collection forms to report the number of surgeons newly certified during the year. Other possible data on surgery could be the number of operational research activities (such as surgical audits, recurrence surveys and MDA-related surgical follow-up), the percentage of people who have been operated on and followed up within one year out of the total number of surgeries, and the mean number of operations performed per surgeon per year (for both campaign and static health facility approaches).

Taking Mali as an example, participants were shown maps of coverage for each element of SAFE in 2010.

Discussion

ICTC considers its actions as sustaining government activities. For instance, consultations are held with the Ministry of Health on issues such as where to drill wells and on a range of other activities. Many countries have priority areas for intervention and they inform NGOs what these are and where the activities should take place. While the sample maps of Mali were appreciated, it was pointed out that Mali was perhaps untypical in that it is very active in trachoma control.

• Report on azithromycin donations

Mr Danny Haddad, Director, International Trachoma Initiative, Decatur, GA, USA

The International Trachoma Initiative (ITI) gave a report on programmes receiving donations of the antibiotic azithromycin (in the form of Zithromax®). In 2010, 53.9 million azithromycin treatments were approved and 37.1 million were reported distributed. This was slightly down from the number distributed in 2009 but higher than distribution in any of the previous years. Donations of the drug Zithromax® are increasing and will peak in 2011 and 2012, while treatments are expected to peak in 2015.

Country scale-up by ITI is planned for four countries (and conditionally two others) in 2011. Scale-up in one country was not approved. Potential reasons for the decrease in reported distribution of azithromycin in 2010 could have been poor reporting or perhaps some distribution was delayed to 2011. It is clear that reporting needs to be improved for the lack of treatment reports could jeopardize future donations of the drug. A means of reporting by mobile telephone is being developed, funded by the Bill and Melinda Gates Foundation.

Changes in the packaging of Zithromax® were announced. The drug is currently donated in bottles of 30 tablets, but as of July 2011 the drug will be supplied in bottles of 500 tablets (250 mg). Each carton of Zithromax® paediatric oral suspension will contain 144 dosing cups (down from the current 288). The new packaging will increase the number of treatments per bottle and will reduce both the number of bottles per carton and cartons per pallet. The number of treatments per pallet of oral suspension will double and the number of treatments per pallet will increase more than sixfold with the 500-tablet bottles. The shelf-life of Zithromax® for the current bottles of 30 tablets is 36 months whether opened or unopened, while for the bottles of 500 tablets the shelf-life will be 48 months (opened or unopened). The shelf-life of the paediatric oral suspension will be 36 months in future.

Discussion

The new packaging of Zithromax® in bottles of 500 tablets will probably mean that bottles will need to be opened at district level and the tablets measured out for redistribution in smaller quantities. The onchocerciasis programme receives tablets in bottles of 500 and no problems have been reported.

On the issue of declining funds at international level for drug supply, it was reported that if the national government cannot guarantee funds for distribution in a particular district then distribution will not be approved. When an application for an azithromycin donation is received, it is reviewed by a trachoma expert committee that looks at each application. The completed application form should be accompanied by epidemiological data and by a national plan. Without this information, no donation can be approved. ITI usually works with the applicant countries to help them to compile all the necessary data.

Azithromycin is a wide-spectrum antibiotic that cannot be given to everyone, and therefore it is important to know specifically how many people have trachoma, and who they are. An impact survey must be conducted after three years of distribution. Though ITI cannot fund these surveys, the organization works with countries to help them find partners who can.

• Trachoma country action plan template

Dr Paul Courtright, Co-director, Kilimanjaro Centre for Community, Moshi, United Republic of Tanzania

The origin of this template for national action plans was a recommendation from the 14th GET 2020 meeting. In order to develop such a template, ITI commissioned McKinsey & Company which held discussions with more than 45 stakeholders in 14 countries, and over 30 interviews with various partners. The three primary objectives of the national action plan template are:

- to show the path to 2020 by using data inputs to generate annual SAFE implementation milestones and by highlighting the gap between current efforts and those necessary to achieve elimination;
- to develop advocacy messages by providing metrics regarding the need for and benefits of elimination (such as the economic loss that results when a person goes blind) and by articulating the actions and resources needed to achieve elimination by 2020;
- to drive stakeholder alignment by bringing together all interested parties in collaborative planning and guiding country leadership in an evaluation of existing partner support and stakeholder activities.

The action plan template was described as a flexible and dynamic tool for developing a clear vision of how to reach elimination. It was stressed that the plan is neither a detailed set of activities nor an

attempt to provide a “one size fits all” solution. The template involves a four-step process from planning, through holding an action plan workshop, then preparing the plan, and finally follow-up.

The planning stage involves national data collection, including from districts that are confirmed as trachoma-endemic as well as suspected endemic districts, documenting who will deal with the elements of SAFE, and assessing the backlog of trichiasis. Key participants in the two-day workshop will be representatives of the Ministry of Health and other relevant ministries (e.g. water, education), NGOs focusing on eye care and NTDs, and funding partners. Involving the key stakeholders in the workshop helps create a unified plan, enables all perspectives to be taken into account, and provides visibility for the partners.

A toolkit (based on widely available computer software) has been developed that includes, among multiple features, template tables and figures, writing guidelines, and a “skeleton” document for completion.

- **Implementing the ITI trachoma national action plan template in Kenya**

Dr Michael Gichangi, Head, Division of Ophthalmic Services, Ministry of Health, Kenya

The trachoma action plan template developed by ITI was pilot-tested in Kenya in March 2011. The exercise served both to develop a concise strategic document to complement Kenya’s existing elimination plan up to 2015 and also to refine the template for eventual roll-out to other endemic countries.

Some 20 stakeholders took part in the pilot test under the leadership of the Ministry of Health, including districts, NGOs, the University of Nairobi and other local partners. The two-day workshop was held in Nairobi and the action plan was drafted during the following week using the toolkit being tested. The draft of the plan was shared with stakeholders for comments and was then finalized when the comments were received. The exercise resulted in two documents – the 12-page action plan and a one-page executive summary.

The national action plan developed from the template included both data from indicator surveys and suspected prevalence from unsurveyed districts. Partner support in SAFE implementation was mapped, revealing a number of gaps in relation to its implementation. The plan includes estimates of the surgery and antibiotic requirements, with milestones for coverage leading up to eventual elimination (plus a set of short-term milestones through to the end of 2013), and with a costing for each district. A calendar was developed showing steps towards elimination by district according to the level of endemicity, which helped in the prioritization of approaches to unsurveyed districts.

Local stakeholders reported that they found the workshop a valuable process. The resulting Kenya trachoma action plan will be presented at the country’s trachoma summit in May 2011.

Discussion

Concern was expressed by some participants that the document produced in Kenya sounded more like a strategic plan than an action plan, and the comment was made that there was no mention of facial cleanliness, environmental improvement or surveillance. However, it was noted that it is really hard to measure the F and E components of SAFE, and while the action plan does not include surveillance as such it points clearly to the tools that are to be used for surveillance.

It was explained by the presenter that ITI had developed the template for a national action plan at the request of the 14th GET 2020 meeting and the pilot test had shown that it could be adapted to local use. It would be impossible to draft a global plan that suits every country, so a template that shows the way but leaves the details to the country concerned was the best way forward. ITI would need to ensure that all elements of SAFE would be included in the template. The challenge for WHO would be to review the final action plan and work on it to align it with the NTD framework.

- **Approaches to reaching out to water and sanitation organizations**

Mr Simon Bush, Director of African Alliances and Advocacy, and Dr Agathe Aboe, Global Trachoma Programme Coordinator, Sight Savers International, Accra, Ghana

The presentation proposed that since water is needed to address the risk factors for blinding trachoma and is a key part of the SAFE strategy, an approach on water and sanitation is needed to implement the full extent of SAFE in country programmes. Trachoma has been known to have been eliminated in many countries because of developments that have included the provision of water and sanitation, and even the gains achieved by using antibiotics widely will not be sustained in the long run without the availability of water and sanitation. Most of the GET 2020 partners have traditionally seen trachoma from the perspective of health rather than of development.

Engaging with water and sanitation organizations may serve to increase resource mobilization for the implementation of the full SAFE strategy. For instance, the SAFE strategy can make a contribution towards achievement of MDGs 4 and 6 (on diarrhoeal diseases and reduction of child mortality), MDG 7 (on access to safe water and basic sanitation), and MDG 8 (on partnership for development). There might also be synergies with other organizations in the aspects of facial cleanliness and environmental improvement, namely the provision of health education and hygiene promotion.

Factors that promote partnership include having a common goal to be achieved or issue to be addressed which, it was felt, would apply to trachoma organizations and those involved in water and sanitation. Other positive factors are a belief in partnership as a strategy, which is certainly the case for those who have joined in the Alliance, and the presence of a convener with the capacity to bring all stakeholders to the table. Each partner must be willing to commit the resources that it is able to share, and partnership will help to identify new resources.

A platform for engagement with the water and sanitation community, both nationally and internationally, could be built by increasing awareness of the disease (e.g. by sharing baseline data

and reports on the prevalence of trachoma and risk factors), and sharing outputs and impacts of implementation of the SAFE strategy. In this regard, efforts should be made to attend conferences of the water and sanitation community – which includes intergovernmental organizations, governments, multilateral and bilateral agencies, international and national NGOs and other development partners – and engage with its members to raise their interest in trachoma control.

Discussion

There was support for the importance of water supply and sanitation in trachoma control, but there was also concern that strengthening water and sanitation alone would not be enough. Behaviour change – encouraging face-washing and improving personal hygiene – was considered a higher priority. Links with the water and sanitation sector were seen as valuable, as were links with other health programmes such as those for diarrhoeal diseases. The need to change behaviour seemed to some participants to be a more likely focus for collaboration than the use of clean water.

It was felt that collaboration between the trachoma programme and the water and sanitation sector might be more likely to occur at local level, where a community strives for a better standard of health and hygiene, than at international level. A multisectoral approach often occurs at local level where programmes may combine to achieve broad sanitary improvement and changed behaviour patterns. While there had been discussions with the water and sanitation sector over the years, trachoma was still seen as only a small part of that sector's strategy. Water and sanitation is also a basic element of the NTD strategy, reinforcing the argument for trachoma control to be integrated into that strategy.

• Country reports

Eight Member States were selected to report to WHO-GET 2020 meeting.

Mali

Dr Sanoussi Bamani, Coordinator, National Trachoma Control Programme, Ministry of Health, Bamako, Mali

Mali has fixed 2015 as the target year for the elimination of blinding trachoma. The programme aim is to reduce TF to a level below 5% in children aged 1–9 years and to reduce TT to less than 0.1% in the total population, according to targets set by WHO. The results of impact surveys conducted in past years reveal that prevalence of TF is less than 5% in children aged 1–9 years in 32 districts of the country. For districts with TF prevalence greater than 5% in children, mass drug administration is to be administered for three consecutive years before reassessment, backed up by elements of the SAFE strategy.

In readiness for elimination in 2015, the specific objectives of the trachoma programme in Mali are to define a system of post-endemic surveillance at district level, put in place such a system in health districts, and evaluate the recurrence of the active form of the disease after all the components of

the SAFE strategy are in place. Training has been taking place to enable health personnel to recognize cases of active trachoma, and villages have been chosen as sentinel sites in each health district that is eligible for post-endemic surveillance. The sentinel sites are changed each year to follow WHO draft recommendations for post-endemic surveillance.

Health personnel travel 10 days per months to do TT surgery and to examine the children aged 1–9 years in schools. If there are fewer than 50 children, the eye nurses examine them all, and if there are more than 50 they examine the first 50 as a sample. If the prevalence of TF in children is less than 5%, the eye nurses ensure that care is provided to the positive cases, check family members and friends for TF and treat them if positive with tetracycline ointment, and check the neighbouring houses and treat any positive cases.

If prevalence of TF in a village is found to be between 5% and 10%, everyone in the village is treated with azithromycin and tetracycline, neighbouring villages are checked and mass treatment is also administered there if the prevalence is greater than 5%, and the SAFE elements of F and E are put in place. Where a village is found to have a prevalence greater than 10%, mass treatment with azithromycin and tetracycline is carried out throughout the whole health district for three years, the F and E elements are put in place and the survey is repeated after three years, and sentinel sites in neighbouring health districts are checked and the survey repeated among children aged 1–9 years.

For TT surveillance, health centres have to be issued with data collection forms for reporting operated cases, recurrent cases and refusals of surgery. The cases of TT have to be tracked down and communities informed about the surgical and MDA campaigns. In all the sentinel sites, all persons over 15 years of age, and particularly the women, must be examined. The reasons for patients who refuse surgery are also examined; usually the reasons are linked to lack of knowledge about TT but it was noted that some women said they refused surgery because they had undergone it in the past and it had not been successful.

Each sentinel site is normally visited once (since the sites change each year), and during the visit the health assistant completes a report form giving details of cases found. All forms are sent to the National Trachoma Control Programme which compiles a composite report. On the basis of information from the sentinel sites, the Trachoma Control Programme makes contact with partners with whom it draws up a plan of action for treatments.

A national surveillance committee is to be formed by the Ministry of Health and other partners. If it is noticed that there is a decline in the socioeconomic conditions in a community, trachoma surveillance will be stepped up. Surveillance for trachoma will need to be integrated into other broader national surveillance systems.

Ghana

Dr Oscar Debrah, National Coordinator Prevention of Blindness, Eye Care Unit, Ministry of Health, Accra, Ghana

At the start of the trachoma programme, trachoma was endemic in 29 districts in two regions in Ghana (TF 16.1% and TT 8.4%, with a backlog 13 000 cases). Control activities in line with the SAFE

strategy were carried out from 2000 to 2008 when an evaluation was conducted. The evaluation showed that TF is now less than 2% in most districts (the highest was 2.8%) and for TT there is an estimated backlog of 5000. In December 2009, WHO sponsored a workshop to develop a surveillance plan. Inputs were received from all stakeholders, a surveillance document was prepared and has been disseminated to all districts in the two regions. The goals are to institutionalize TF and TT surveillance in the trachoma-endemic districts and to integrate TT surveillance into the national disease surveillance system.

The specific objectives of the surveillance will be to detect and manage TT cases in trachoma-endemic districts, detect and respond to TF cases in communities where the prevalence is greater than 5%, and to collect information on facial cleanliness among children aged 1–9 years, on households' availability of water and on households using latrines. There will be active epidemiological surveillance for TT and TF, involving active case searches for TT in persons of 15 years and above in selected sentinel communities and for TF in children aged 1–9 years in sentinel communities. The first-line communities (two per district) will be randomly selected each year and the second-line communities will be selected if TF in a first-line community is greater than 5%.

Surveillance will also involve school screening for TF in pre-schools and up to class 3 as part of the school eye health programme. This will be done at the beginning of the school year. Passive surveillance for TF and TT will be both community-based (with volunteers identifying cases and reporting monthly to the subdistrict and then to the district) and facility-based. Children aged 1–9 years coming to the clinic for any reason will have their eyes checked for TF, adults aged 15 years and above will also be screened for TT, and cases will be reported on a specific form. Forms are to be reviewed monthly and untreated recorded cases are to be traced to their communities. Surveillance case definitions have been defined for use by volunteers and health workers, and indicators have been agreed for both TF and TT. Ophthalmic nurses are to be trained or retrained in grading of trachoma, and there will also be training of health workers and community volunteers.

If a child is found with TF, friends and family members are to be examined and treated as needed. If friends are found to have TF, the whole community is to be examined. If TF prevalence in the community is less than 5%, then the cases identified – and their family and friends – are to be treated once. If community TF prevalence is greater than 5%, there should be MDA in the community for three years, F and E should be improved for three years, and nearby communities should be examined. If TF prevalence in nearby communities is found to be greater than 5%, the entire subdistrict is to be treated for three years. All TT cases found are to be provided with surgery and there should be follow-up on all cases operated in order to verify the rates of surgical failure and recurrence.

A preliminary total budget estimate of US\$ 160 000 per year is anticipated, though this does not include treatment with antibiotics or provision of surgery.

Nepal

Mr BB Thapa, Director, National Trachoma Programme, Katmandu, Nepal

Nepal is endemic to three NTDs, namely trachoma, lymphatic filariasis and soil-transmitted helminths, with a number of districts having two or even all three of these diseases. The population at risk from trachoma is 3.5 million and the disease is endemic in 19 districts (though a further 12 districts still have to be mapped). Trachoma has been eliminated from nine of the 19 known endemic districts, while 10 are receiving MDA. The target date for elimination in Nepal is 2014, and the aim is to keep TF prevalence to less than 5% in children aged 1–9 years and to reduce TT to less than 0.1% of the population.

Nepal has a national plan for integrated control of NTDs. Chemotherapy interventions are coordinated. There is also an independent steering committee for NTDs, and below that a technical working group of programme managers.

There is a plan for post-MDA integrated surveillance for NTDs and it is likely that four districts will be identified for this. A parasitological survey is under way in four districts at the lymphatic filariasis sentinel sites and this may lead to future integration of monitoring and evaluation and of surveillance. The trachoma programme will follow WHO's recommended guidelines for a post-MDA surveillance.

Future challenges for NTD interventions include a poor understanding of the NTD situation and of the integrated strategies to address the problem at different levels. Integrating all NTD activities such as drug distribution and post-MDA surveillance will also be a challenge as these have been carried out independently for many years. The school de-worming programme is in need of expansion in all 75 districts and should also cover children who do not go to school. A regular post-MDA surveillance system needs to be established.

Senegal

Dr Boubacar Sarr, Coordinator, National Blindness Programme, Ministry of Health and Preventive Medicine, Dakar, Senegal

Trachoma is the second leading cause of blindness in Senegal. Outside of the capital city of Dakar, the prevalence of TF is 10.8% among children aged 1–9 years, with prevalence of TT at 1.2%. In almost all parts of the country the prevalence of TT in women is greater than 1%.

Since most cases are the scarring form of the disease, three priority regions were identified, a five-year implementation plan was drafted in 2005, district surveys have been completed, MDA has been introduced and surgical campaigns have been implemented as part of the SAFE strategy. With regard to surgery, an approach was tried with community nurses performing the surgery. This showed some improvement in 2007 but has declined in impact since then. The nurses had too many other responsibilities, their motivation dropped, and the standard of surgery was not always as good as it should have been.

The presentation focused particularly on trachoma surgery in the district of Thiès, which has some 420 000 inhabitants, with 70% of them in urban areas. The district has one hospital, two health centres and 45 health posts and had a backlog of 3000 trichiasis cases. The district has "associations", each of around 25 health workers, throughout the area. These are responsible for

health promotion among the population, visiting homes and communities and generally trying to encourage people to seek health care when they needed it.

The trachoma project involved training community nurses in primary eye care and training the associations to identify cases of trichiasis. Four trachoma centres were set up and equipped for surgery. Agreements were drawn up with the 13 associations involved in the project (325 health workers in total), and 216 000 persons were visited during the 10 months of the project. Some 19 500 sick persons were identified during these visits, of which 2753 were cases of trichiasis and were referred to the trichiasis centres.

Of these trichiasis cases, 1961 (71%) visited the trachoma centres but only 1266 were operated on. This low number (compared to the total of persons with trichiasis) was felt to be due to refusals and the weak persuasive powers of the health workers. The project showed a clear underutilization of the eye health services that had been made available. There was some concern that the training of health workers had not been good enough.

When a SWOT analysis was applied, the strengths of the project were considered to be the fact that the care was free of charge, the standard of surgery was good, the services were provided close to the places where people lived, and extra training was given to the staff involved. Weaknesses were judged to be the slowness with which the project got under way, difficulty in mobilizing the support of the local authorities as they tended to be preoccupied by political issues (an election campaign), there was no coverage in villages without associations, and there was limited follow-up.

Opportunities noted were that the project was simple to implement and is replicable. Threats included the lack of funding, the heavy workload on the nurses, and the risk of politicization of the project (the choice of persons who should participate in the associations was not always based on their skills). It was concluded that trichiasis surgery is a priority for trachoma control in Senegal and that, despite its limitations, use of the associations of health workers does provide an opportunity to ameliorate the suffering of many people with the disease.

Chad

Dr Djore Dezoumbe, Coordinator, National Blindness Control Programme, N'Djamena, Chad

Chad has over 11 million inhabitants, with most people living in the capital, N'Djamena, or in the southern part of the country. The country has one of the least favourable standards of health in the African Region. The health services have a central administration in the capital, 22 regional health delegations, and 64 health districts. There is a lack of recent data on eye diseases, but it is estimated that the prevalence of blindness is around 2.3%, with cataract causing half the cases of blindness and with trachoma, opaque cornea, glaucoma and onchocerciasis causing the rest. The National Blindness Control Programme was established in 1991.

The country has eight ophthalmologists, five of whom are in the capital. There are also 23 ophthalmic technicians and 33 nurses specialized in ophthalmology. There are five ophthalmology centres (in N'Djamena and four other towns) and 11 secondary centres run by ophthalmic technicians. These services cover 12 of the Chad's 22 regions and are desperately short of

resources. In this situation it is currently estimated that the prevalence of TF is about 31.5% in children aged 1–9 years, with a prevalence of 16.7% for severe inflammatory trachoma. Among women over 14 years, the prevalence of severe inflammatory trachoma is around 1.5%, with opaque corneas caused by trachoma at around 1%.

Currently, trachoma control is limited to one-off activities such as treatment with tetracycline ointment and surgery performed during “ophthalmic missions” that travel to various parts of the country. Some 1085 trachoma surgeries were performed in 2009 and some 483 were performed in 2010.

The strengths for trachoma control in Chad are that a Ministry of Health blindness programme exists, eight ophthalmology districts have been created (of which two are already functional), some survey results are available (although they are old), a course on ophthalmology has been created at the national training institution for nurses, there is a possibility to integrate trachoma control into NTD activities, and the Ministry of Public Health is fully behind the fight against blindness. It was reported that for the first time in 2010–2011 the blindness programme was allocated a line in the budget of the Ministry of Health.

Weaknesses for trachoma control include the lack of a plan of action, the lack of a staff and few resources. There are also currently no partners working in trachoma control in Chad. The current programmes against blindness are vertical in nature and there is no specific one for trachoma. In addition, the country’s instability and intermittent warfare has caused population movements that do not help the situation and that make any survey data of little use.

It is urgent to start a programme for trachoma control in 2012. The general objective of the programme will be to eliminate trachoma in Chad by 2020. The specific objectives will be to draw up an action plan in 2011, to organize surveys in all trachoma-endemic regions – and in all regions suspected to be trachoma-endemic – in 2012, to promote the SAFE strategy, and to start the administration of azithromycin in 2013.

In the brief discussion that followed, the lack of partners working in Chad was highlighted. The point was made that partners are reluctant to work there because there is little existing activity for them to build on and there is also a lack of security in the country. The participant from Guinea commented that trachoma control in his country was in a similar situation to that in Chad. Several Alliance partners said they would be willing to help, and it was proposed that a group of Alliance partners should meet to discuss what kind of assistance could be given to such needy places. The question was raised as to whether it was best to do treatment only in areas where the situation is known thanks to surveys having been conducted, or whether one can go ahead without data. Chad was encouraged to proceed with MDA as early 2012 if possible.

Côte d’Ivoire

Dr Marie Madeleine Kouakou Ilunga, Coordinator, National Blindness Control Programme, Abidjan, Côte d’Ivoire

There has been little reliable evidence of the size of the trachoma problem in Côte d'Ivoire. Consequently a study was recently carried out to gather data on the prevalence of the disease in six regions in the northern part of the country (with a total of more than 1.3 million inhabitants). The aims were to evaluate the prevalence of active trachoma among children aged 1–9 years, assess the prevalence of TT in the population (both males and female) over 14 years of age, and to look for evidence of known risk factors.

In the study, 2074 children aged 1–9 years were examined, as were 1225 adults (more women than men). Results showed that prevalence of active trachoma among the children was 3.1%, with a prevalence of 0.2% of TI. Prevalence increased with the age of the child, being 1.3% at 1 year, rising to 5% at 3 years and 4% at 5 years, and then declining slowly to 3.3% at 9 years.

Among the persons aged over 14 years who were examined, just three cases of TT were identified (two women of 65 years and one of 70 years). Prevalence of TT in persons aged 14–40 years was 0.22%, and 0.65% in those aged over 40 years.

A variety of risk factors for trachoma was identified by the study, including: having a dirty face, not washing when one gets up in the morning, washing fewer than four times a day, living in a house with fewer than three rooms, living in close proximity to cows, and not having electricity.

Prevalence among children in the region of Odienné was at 8%, but two villages showed prevalences of 10.7% and 24.5% respectively. Consequently trachoma did not figure as a major public health problem at regional level, but in certain areas the prevalence was high.

The next step in Côte d'Ivoire is to implement a plan for elimination in line with the SAFE strategy in the region of Odienné where the pockets of high prevalence were noted. An action plan has been drawn up and funding is now being sought for implementation. The overall objectives of the plan are to reduce prevalence of trachoma in Odienné by at least 50% between 2011 and 2013, to reduce the number of trichiasis cases by 2013 by providing surgery to 95% of cases identified, and to provide antibiotic treatment (azithromycin and tetracycline ointment) to at least 80% of the eligible population.

Brazil

Dr Rosa Castalia, Health Surveillance Secretary, Epidemiological Surveillance Department, Ministry of Health, Brasilia, Brazil

Brazil's population of 190 million is 20% rural and 80% urban, with 80% of households linked to the public water system. A national trachoma survey was carried out from 2002 to 2008 to update the epidemiological situation and showed that the disease is present in all states of the country.

Even in areas with a high level of development, large cities are surrounded by slums and other very poor areas populated by persons from rural areas who moved to the fringe of the cities in the 1980s and 1990s. In parts of these slum areas there is trachoma. Some 234 Brazilian municipalities were found to have a prevalence of TF of more than 10%, and all these were areas with a lower than average economic level. Among the indigenous population there was a particularly high prevalence of TT – as in the Rio Negro area of Amazonas State.

As a result of the study, priority areas have been identified for trachoma control activities. It is estimated that 48 million people are at risk of trachoma. The criteria of risk are municipalities with TF prevalence equal to or more than 10%, persons living in absolute poverty, historically endemic areas, very poor metropolitan areas, and very poor indigenous areas. The total population at risk is in 600 municipalities (11% of all municipalities in Brazil).

Brazil has set 2015 as its target year for trachoma elimination, with a goal of 6 million doses of antibiotics over three years and 7000 surgeries. The 600 municipalities with at-risk areas are being targeted with interventions for face cleanliness and environmental improvement. In this regard, the programme is working with the National Health Foundation (linked to the Ministry of Health) which is providing sanitation in indigenous areas and in areas of particular epidemiological interest.

Between 2006 and 2011 the national programme held meetings for the development of 10 state plans for elimination, issued a number of technical guides, provided training (for 1500 trainees), and has provided medications and other supplies. MDA has been under way in indigenous areas, and a national task force has been formed to support the national elimination plan. In April 2011, a meeting was held with experts, state professionals and funding partners to further define priorities, assess budget needs and agree on the location of further surveys. Brazil's National Plan for Blinding Trachoma Elimination 2011–2015 is to be launched on 5 May 2011 in Pernambuco State, which is one of the priority states.

Current challenges include scaling up the active search for cases in remote areas, and particularly in indigenous areas, facilitating access to the referral centre for TT cases in remote or indigenous areas, establishing trachoma surveillance as a routine element of primary health care, and proving support to the MDA teams. A new Brazilian law which states that antibiotics may be prescribed only by physicians is also causing some problems to the programme.

Democratic Republic of the Congo

Dr Jean Ndjemba, Head of the Office for Ocular Diseases, Ministry of Health, Kinshasa, Democratic Republic of the Congo

Control of NTDs in the Democratic Republic of the Congo has taken a significant leap forward since 2006 when it was done by a series of vertical programmes. In 2008, the NTD programme took responsibility for the control of 12 parasitic diseases which were split into two groups – those that can be managed with preventive chemotherapy (such as onchocerciasis, lymphatic filariasis and trachoma) and those that require individual treatment (such as leishmaniasis and leprosy).

There is considerable political backing at national level for the NTD approach. Three relevant documents produced by the Ministry of Public Health are a survey protocol for mapping NTDs, a national policy on NTDs, and a strategic plan for NTD control from 2009 to 2013.

Surveys of several NTDs, though not trachoma, were carried out in 2009 and 2010. The NTD strategic plan for 2009–2013 is being revised to turn it into a plan for 2011–2015. A survey of 22 cases of trachoma was published in 1993 and it is urgent to bring these data up to date. The aim is

to carry out a retrospective study of records of ophthalmology examinations for cases of trachoma reported in the same area as having been treated by an ophthalmic nurse.

The Democratic Republic of the Congo borders on nine other countries, of which seven are endemic for trachoma. The borders are fairly porous with a lot of cross-border trade so it would be easy for the disease to be imported. Therefore plans have been made to develop a protocol for rapid evaluation of trachoma in 40 districts bordering on trachoma-endemic countries, though technical assistance is required to do this.

One major constraint is the huge size of the country (2.4 million square kilometres) which makes it difficult to reach the more remote health districts. In addition, there are security problems in Kivu and in the eastern part of the country, which are also the high-risk areas for trachoma. Other difficulties include the lack of funds for NTD control in general – and for trachoma control in particular – and the absence of partners focused on trachoma control.

The lack of funding for the Ministry of Health NTD department hampers leadership and coordination of the NTD programme. The need for a solid partnership to turn plans into action is urgent.

• **Regional elimination plans and developments**

Pan American Health Organization

Dr Juan Carlos Silva, Pan American Health Organization, Washington, DC, USA

In 2009 the PAHO Directing Council adopted resolution CD49.R9 on the elimination of neglected diseases which called for all new cases of blindness caused by trachoma to be eliminated in the Americas Region to a prevalence of less than 1 in 1000 cases. The resolution also stated that the prevalence of active trachoma should be reduced to below 5% in children aged 1–9 years. There are three known trachoma-endemic countries in the Americas – Brazil, Guatemala and Mexico.

In Brazil there has been a trachoma programme for several decades. Leading up to 2008 there was an assessment in 295 (out of 5229) municipalities with a low human development index. Also, 292 indigenous communities were examined. Following that, national and state plans were made for trachoma elimination.

In Guatemala, there has been a trachoma programme since 2002, trachoma is still present in two states, and a survey was conducted in 2011. In Mexico, trachoma is endemic in the state of Chiapas and the Mexican trachoma programme was begun in 2001. The target for elimination is 2013, and this is close to being achieved. In addition, a survey conducted in Colombia in 2006 and published in 2010 revealed 114 persons with trachoma in two communities.

As for next steps, Mexico will aim to be assessed and be classed as a “formerly endemic” country. Trichiasis may still remain and there will need to be continued detection and treatment of TT until

the goals are reached. Active surveillance needs to be established and the data will need to be organized for the verification of elimination.

For the currently endemic countries of Brazil and Guatemala, a SAFE plan of action has to be developed for each country, state or municipality/district, and there is a need for financial support to the programmes. Management of the programmes and implementation of the action plans also need to be assured.

For the non-endemic country, Colombia, where new foci of the disease have been reported, PAHO will advocate with the health authorities to have them give more attention to the issue. More data need to be sought since there is not enough evidence on the situation. A baseline survey may be planned and a SAFE plan developed. The cases were found in the rain forest.

There are also three countries – Bolivia, Peru and Venezuela – that are not endemic and have no reported cases but have borders with Brazil. Here, evidence will be collected about the districts at risk and a baseline survey will be planned.

PAHO is holding a regional conference on trachoma in May 2011. Johns Hopkins University has assisted with the design of surveys since PAHO has very limited experience of trachoma. Technical support will also be needed in grading trachoma since TF may often be overdiagnosed when there is little knowledge of it. Plans may also need to be made for training in surgical procedures for trachoma, and laboratory support will be required. Currently PAHO is still trying to gather evidence in order to proceed with planning for elimination. For instance, guidelines will be needed for the verification of elimination.

Pacific islands

Dr Richard Le Mesurier, Chair, International Agency for the Prevention of Blindness, Western Pacific Region, and Centre for Eye Research Australia, Melbourne Australia

In 2005, a WHO global mapping of trachoma indicated uncertainty about the endemicity of the disease in the South Pacific. In 2008 a team of five investigators visited Fiji, Kiribati, Solomon Islands and Vanuatu to look for evidence of endemic trachoma. While there, they conducted a rapid assessment and found relatively high rates of trachoma. The results showed active trachoma ranging from 6% to 53%, with trachomatous scarring found in 68% of adults examined. The team found that some trichiasis surgeries were still being done in Fiji, Kiribati, and Solomon Islands.

Lack of hygiene was clearly a risk factor. Of the children examined, 32% had a “dirty face”, and 45% of these children with dirty faces had active trachoma compared to 24% of children with clean faces. There was apparently limited access to toilets and most (i.e. more than 80%) of the villagers used either the beach or nearby bushes for toilet purposes. There was a general lack of cleanliness in many areas where people lived.

In the Solomon Islands, the team made a number of recommendations to the Ministry of Health, suggesting that village-based prevalence surveys should be organized in all provinces and that risk factors should be identified so that treatment can be implemented effectively. The ministry was

urged to work with the WHO country office and the regional office of the International Agency for the Prevention of Blindness (IAPB) to implement the SAFE strategy throughout the islands.

In 2009, the Solomon Islands trachoma programme decided to find out more accurately the prevalence of trachoma in the Solomon Islands and to identify local risk factors. Funding was obtained and a workshop on modified village-based trachoma rapid assessment was held to prepare community health nurses at area health centres. The village-based survey set out to identify all high-risk communities and to screen all children aged 1–10 years and all adults over 40 years. The two-day workshop comprised both theory and fieldwork.

The overall objectives of the assessment were to diagnose, grade and treat any trachoma that was found, to conduct a village-based trachoma prevalence survey (of all available children aged 1–10 years and adults over 40 years of age). A data booklet was prepared for the researchers; it contained rapid assessment guidelines and forms that needed to be completed. In all, 1336 adults aged over 40 years were seen by the researchers at 69 sites, as were 5177 children aged 1–10 years. Some 3206 households were examined with regard to environmental factors.

The assessment revealed that the village prevalence of TF ranged from 3.8% to 91.5% and that the average of children with dirty faces was 37.2%. The average rate of trichiasis was shown to be 0.47%. The assessment of environmental factors showed that the nearest potable water was more than a 30-minute walk away for 26% of the households surveyed, and that in 72.5 % of cases there was rubbish and animal waste near the dwelling. Some 88.7% of households lacked functioning latrines.

The researchers concluded that the rapid assessment had revealed sufficient evidence to warrant the need for trachoma control measures to be taken and for more surveys to be carried out. As a result, more village-based prevalence studies will be conducted, health education will be strengthened, there will be MDA with azithromycin, and advocacy will be carried out to improve sanitation both within the household and outside it.

In discussion following the presentations, the question of resistance to azithromycin was raised. Pfizer explained that azithromycin was widely used for trachoma because it is a very reliable antibiotic and that any information Pfizer might have about resistance could be supplied to Alliance partners if required. However, some studies had found no evidence of resistance.

- **Reaching elimination by 2020: the International Trachoma Initiative elimination master plan**

Mr Chad MacArthur, Director of Neglected Tropical Disease Control, Helen Keller International, New York, NY, USA

On behalf of ITI, Mr MacArthur presented *2020INSight*, a global strategic plan for the elimination of trachoma developed by McKinsey & Company and commissioned by ITI. The 43-page draft plan, which was described as “a global strategy that lays out path to elimination by 2020 and forms the

trachoma section of the NTD plan”, includes an overview of agreed milestones. It can also serve as an advocacy document.

2020INSight was developed through interactions with a broad cross-section of the trachoma community. The contents and scope of the document were explained, its value for advocacy was pointed out, and participants were introduced to some of the material inside it. Charts and case studies make issues clearer, and the text is straightforward and readable. Much of the material in *2020INSight* is not new, but it may be helpful both for reference and advocacy to have it all together in one publication. The authors also intend it as a tool for fundraising.

Discussion

In relation to the fundraising potential of *2020INSight*, IAPB reporting having had discussions with the World Bank on possible additional funding for elements of trachoma control. Speakers welcomed the document as an advocacy tool and for providing a clear representation of the milestones along the process leading to elimination.

A question was asked as to the status of the new document and whether the document had been endorsed or will be endorsed by WHO. It was explained that it could be published and distributed by WHO but this would require consultations with Member States through the appropriate channels and modalities set by Government for this purpose.

Partners agreed that they would find it valuable as an advocacy document and while they would prefer it to be endorsed by the WHO Alliance, felt they did not wish for it to pass through the WHO consultation and clearance process. Some concern was expressed by some delegates that no copies of it had been shared with participants so it was difficult to approve it or even make comments about it.

It was agreed however that, since the document contained material that would be of great use to several organizations, the partners who worked on it should share it with other interested parties.

- **Conclusions and recommendations**

Conclusions

The 15th WHO-GET 2020 meeting was characterized by the largest attendance of member countries and partner organizations in the history of the Alliance. This growing commitment is commended.

Since the establishment of the Alliance in 1997, significant progress has been made in reducing the global burden of blinding trachoma. However, there is great urgency to expand and accelerate trachoma control through the implementation of the SAFE strategy, fundraising and advocacy to attain the WHA51.11 goal, which is the elimination of blinding trachoma by the year 2020. In this context, attention to countries facing particular challenges in implementing elimination programmes is essential.

The integrated control of neglected tropical diseases (NTDs) provides opportunities for a more efficient and sustainable expansion of trachoma elimination programmes.

As a development issue and a disease of inequity, trachoma is closely linked to progress towards the Millennium Development Goals (MDGs).

Recommendations

1. Given the need for scale-up to sustain current gains and to reach the goals of GET2020, there is a need to ensure that F & E activities are a full part of the SAFE strategy. Programmes on water and sanitation and on behaviour change should become part of each national Trachoma Action Plan whether currently in development or already being implemented, and partnerships should be developed to deliver the services needed.

The meeting expressed concern that some countries have yet to commence trachoma control and, in view of the increasingly limited time remaining to achieve the goal of eliminating blinding trachoma by 2020, called on relevant governments to adopt urgently a more intense focus on implementing the full SAFE strategy in collaboration with Alliance partners.

2. In recognition of the need for endemic countries and their partners to be strategic in their planning for achievement of GET 2020 goals, a Trachoma Action Plan template was presented to the meeting, together with a report on its use in one of the endemic countries (Kenya). The meeting encouraged endemic countries to use the template to analyse critically the current state of their national programmes, and to identify the steps that need to be taken in the time remaining before 2020 to ensure that national objectives for the elimination of blinding trachoma are met.
3. The meeting noted with concern the decline in surgical output and distribution of antibiotics in 2010. Countries were urged to ensure that programmes become more productive in 2011 and were asked to report progress to the 16th GET 2020 meeting in 2012.
4. The alignment of data from national programmes and an NGO, which was presented by WHO, is necessary and should continue. Interest was expressed in the WHO Global Health Observatory (GHO) and the WHO Secretariat was requested to inform the members of the Alliance when the GHO becomes available online.
5. Noting recommendations 3 and 4 of the XIV meeting of GET 2020, the meeting noted with disappointment the inability to table the report of the 3rd Global Scientific Meeting, with its recommendations on survey methodology and certification of elimination, and called for this important report be published urgently to facilitate future planning.
6. The WHO NTD framework provides a good platform for the expansion of trachoma elimination as an integrated component. The meeting noted with regret the absence of representatives from the WHO NTD department during part of the discussions and urged that full participation in future meetings should be seen as a priority for the effective coordination of NTD programmes. The WHO Global NTD Roadmap includes trachoma, and the Secretariat will continue to ensure that trachoma is adequately reflected in the NTD work.
7. It is important not to lose momentum and focus on the elimination of blinding trachoma. The meeting expressed a desire for the global trachoma-specific advocacy tool (2020 InSight) to be finalized and distributed as soon as possible by ITI.

8. The WHO Secretariat was requested to make the conclusions and recommendations of the 15th GET 2020 meeting, and the presentations made at the meeting (subject to permission being granted by the presenters), available to Member States and partners within two weeks of the meeting via the WHO web site. Participants requested that the report of the 15th GET 2020 meeting should be made available within eight weeks. The meeting asked that the report from the WHO Secretariat should, in addition to showing progress made in achieving the annual intervention objectives, also show the progress that has been made globally towards attaining the ultimate intervention goals for all components of the SAFE strategy. Document for future GET meetings should be circulated in advance of the meetings.
9. It was agreed that an ad hoc committee of GET 2020 members should meet to discuss proposal for the format of the 16th meeting.

- **Date and place of next meeting**

A comment was made that there might be an opportunity to hold the next meeting – the 16th GET 2020 – outside Geneva, as had happened twice in the past. Several countries were suggested and the Secretariat agreed to respond to countries if an offer was made. As it had been recommended that an ad hoc committee should meet to discuss the format of the next meeting, it was suggested that the committee should deal with the matter of finding a location too. There was general agreement on this.

- **Closure of the meeting**

On behalf of WHO, Dr Mariotti thanked the participants for their contributions to the meeting and for travelling so far in order to attend it. He thanked ITI for its support to the meeting, and Pfizer for its support to the work of the Alliance and for its generous donations of azithromycin. He expressed his thanks to the new partners in the Alliance, to WHO colleagues for their work in regard to the meeting, and for the chairs and rapporteurs for their invaluable roles. He assured participants that WHO was committed to the work of the Alliance and would continue to support it.

Annex 1. Scope and purpose of the 15th meeting of GET 2020

Purpose of the Annual Meeting of the WHO Alliance for the Global Elimination of Blinding Trachoma by the year 2020 (GET 2020) is to monitor progress towards elimination at global level, exchange information and experience on SAFE strategy implementation, review the partnership opportunities at global and national level, discuss obstacle and barriers to the achievement of the common goal, i.e. the elimination of blindness from trachoma by the year 2020.

The 15th meeting is expected to provide these opportunities and specifically to allow discussion of:

- Review the global status of SAFE strategy implementation in endemic countries: Ultimate Intervention Goals (UIGs) and Annual Intervention Objectives (AIOs); detailed review of specific country situation;
- Update on the global Neglected Tropical Diseases (NTD) framework, with particular reference to the human resources training which can profit trachoma elimination;
- Review the recent results of global scientific meeting and national surveillance review;
- Report from WHO and NGOs on various activities and opportunities;
- Review and discuss the global plan to achieve GET2020.

Progress reports on the implementation of the SAFE Strategy and activities to meet the AIOs, prepared in collaboration with all the national stakeholders, will be submitted by Country Representatives to the WHO Secretariat for presentation at the meeting.

Results from recent evaluations and lessons learnt will be presented to provide an opportunity for countries and partners to discuss further.

Updates on ongoing research projects and recent research findings on the SAFE strategy will also be presented.

Additional objectives of this meeting are:

- to introduce new members of the WHO Alliance for GET2020;
- to review the progress made in the development of partnerships and resource mobilization opportunities at global, regional and national levels.

Expected outcomes of the meeting are:

- global monitoring of progress towards the elimination of blinding trachoma;
- improved coordination among the WHO GET2020 Alliance partners;
- exchange of information on SAFE implementation at national level;
- report of the meeting to share progresses towards WHA51.11 with all endemic countries and partners.

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