HOW MIGHT WE KNOW, REDUCE OR MITIGATE? — THE PREVAILING LOCAL TB/ MDR-TB BURDEN &
THE IMPACT IT CAN HAVE ON OUR PEOPLE AND NATION (SOMALILAND).

(Preliminary Literature Review and Recommendations):

PART II
BY
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Tuberculosis (TB) is a serious public health problem in Somalia and Somaliland. In 2013, more than 13 000 new cases were detected, one every 40 minutes. It is estimated that every 100 000 persons, 532 have contracted the disease, and the number of cases detected every year continue to increase. (1)

To understand the effect of drug-resistant TB and better plan for treatment needs, The National Tuberculosis Control Program of Somalia and Somaliland directly measured drug-resistance prevalence among a representative sample of TB patients in whole regions of Somalia and Somaliland. (2)

According to the National Drug Resistance survey of Somalia and Somaliland on Multidrug-Resistant Tuberculosis that Conducted between 2010–2011 by WHO and other partners—which was completed in Oct 2011 and then was a Published Research In March 2013 at WHO & CDC sites. (2) that is also available at here (http://wwwn.cdc.gov/eid/article/19/3/12-1287_article) hence, has been the best and the first wakeup call we have heard about the status of the drug resistant tuberculosis in the region.

However, In this nationwide survey in 2011, multidrug-resistant tuberculosis (MDR TB) was found in 5.2% and 40.8% of patients with new and previously treated TB, respectively. These levels of drug resistance are among the highest ever documented in Africa and the Middle East. This finding presents a serious challenge for TB control in Somalia and Somaliland. (2)

The Research report further explained risks posed by this MDR-TB and said “History of previous anti-TB treatment was the strongest independent factor for MDR TB (odds ratio [OR] 23.0, 95% CI 9.4–56.1, p<0.001), and living in the south-central region or in Puntland was associated with a significantly higher risk for MDR TB than was living in Somaliland (OR 3.6, 95% CI 1.9–6.9 p<0.001 for living in Puntland and OR 4.3, 95% CI 1.7–11.3, p = 0.003 for living in the south-central region). Associations between MDR TB and sex, age, and country of birth were not significant”. . (2)

“Resistance to anti-TB drugs is considered an emerging concern in the country,” says Dr Popal, representative of the World Health Organization (WHO) in Somalia. “The levels of MDR-TB in Somalia are among the highest in the Eastern Mediterranean and African region.” Drug resistance arises due to improper use of anti-TB medicines, including, administration of improper treatment regimens and failure to ensure that patients complete the whole course of treatment. A National Drug Resistance survey completed in 2011 found that the prevalence among newly diagnosed cases is at 5%, and among previously treated TB cases is 41%. (1)

This finding presents a real emergency for the National Tuberculosis Control Program considering the duration of second-line treatment (>2 years) (11,12), the current availability of such treatment in Somalia for only few patients, and the country’s lack of laboratory capacity to diagnose drug resistance. (2)

According to Dr. Vianney Rusagara, Global Fund Programme Director for World Vision Somalia, more than 50% of
tuberculosis patients still remain undetected, as the facilities are simply not adequate. (3)

On the other hand, “In a drug quality survey conducted in Somalia in 2010, 60% of 10 products containing first-line anti-TB drugs that can be easily purchased from pharmacies and informal health care providers met international quality standards (I. Sindani, pers. comm.). The compound most commonly found in insufficient concentration and quality was rifampin. The extensive use of drugs of suboptimal quality, the widespread practice of using wrong medical prescriptions, and incomplete adherence of patients to treatment are the most likely reasons for the high levels of MDR TB in Somalia. These levels appear to be highest in the south-central region, where the security situation is most volatile and disruption of care more frequent. This region also is most affected by recent food shortages (14) and has the most internally displaced persons (15), factors that are expected to exacerbate disease progression and transmission of M. tuberculosis”. (2)

Likewise The World Vision on [24 March 2015] The World TB Day has reported to have assisted “the treatment of 113,000 tuberculosis patients with an 88% success rate since 2004”. (3) The issue is exacerbated by a weak health system, unregulated private tuberculosis clinics, and unregulated tuberculosis drugs on sale, meaning patients receive inadequate or interrupted tuberculosis treatment. (3)

According to the WHO/EMRO Message on [24 March 2015] by The Regional Director on the occasion of World Tuberculosis Day 2015, the statement was said that “Available information indicates that significant progress is being made to bring the TB epidemic under control in Africa. The previously increasing trend of TB cases has been halted and the Region is observing a declining trend of TB in the last four years.” (4)

Adding that “In spite of this progress, TB continues to be a major public health concern. The African Region has the highest TB and TB/HIV co-infection rates in the world and the emerging challenge of drug resistant TB (MDR-TB) is yet to be adequately addressed”. (4)

*source: [WHO Global TB Report 2014]*

**AMONG THE CHALLENGES AND GAPS ARE:**
According to the findings by Impact Evaluation Report of The World vision Managed global fund TB programme in Somalia, [Nov 26, 2013 ] has highlighted that—The TB programme in Somalia focuses its information collection on activities of screening of sputa for TB and treatment of infected individuals and not formally collect information on the individual related to socio economic and cultural variables that are necessary for determining the level of disease burden. (6),

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the Available data was limited by lack of relevant baseline data to calculate DALY which would have enabled the determination in the reduction of the TB disease burden in Somalia. (6),

Moreover, information available on the socio economic situation of the population was not adequate enough to permit the determination of the impact on the programme in reducing the disease burden of TB in Somalia. (6),

The Report further highlighted regarding the Reduction in morbidity and mortality of TB—There are no formal records on morbidity and mortality on TB and HIV/AIDS, There may be a significant numbers of patients dying from TB, and TB/HIV co infection related deaths that may be recorded as lost from treatment due to absence of formal death notifications. Noting that the Current figures used for mortality are estimates based on modeling for developing countries. (6),

Finally the evaluation report highlighted —The evaluation can only allude to the anecdotal observations from communities that indicate that less people are now dying from TB than before due to availability of treatment. . (6),

What has been Achieved thereafter:

There are currently 45 patients being treated for MDR TB at the Hargeisa Group Hospital. The youngest is six months old. To mark World Tuberculosis Day, the MDR TB ward has been officially opened in Hargeisa on 24 March 2014. The new facility will allow the expansion of treatment, targeting 85 patients affected by MDR-TB. (1).

The MDR-TB treatment was introduced by the TB programme for Somalia. The programme, led by the health authorities, is supported by the Global Fund and implemented by the nongovernmental organization World Vision, with technical support of WHO. The TB programme in Somalia was re-established in 1995, with the overall aim to reduce significantly the burden of TB in Somalia. To date, there are 68 TB centres operating across the country, and Somalia maintains a TB treatment success rate above the WHO recommended of 85%. (1).
CONCLUSION:
The currently available literature found indicate critical gaps and there is a long way to go—there is a need for local commitment and actions as well as Global and regional solutions and support to address this Challenge before it goes out hand—knowing that tuberculosis (TB MDR-TB) is not only a public health challenge, but also a far-reaching social, economic, political, and security threat having substantial cross-linkages in terms of co-morbidities with other conditions.—However Based on the above highlighted gaps, There is a clear indication suggesting that neither the prevailing local Burden of TB/MDR-TB could be determined nor its Impact could have been exactly Measured, respectively —Other than simply just estimating or modeling on the developing countries—Much more needs to be done to control the TB/ MDR-TB Control in Somaliland & Somalia. However, the existing critical gaps of such needs to be filled with the adaptable, accessible and available, latest best practices, Open source model tools and technology, by buying-in the obtainable technical supports from The International Development & Technical Agencies, coupled with the local capacity development and utilization pre-existing capabilities.

STRATEGIES, ACTIONABLE RECOMMENDATIONS AND SUGGESTED SOLUTIONS:
The following are actionable Recommendations and suggested solutions—formulated in simple but understandable mind map— that can be implemented by boosting in a non-duplicative manner but complementary and sustainable approach building on the previously existing structures and ongoing programs and strategies for halting, containing and reversing the impact of this emerging disaster of multi-drug resistant forms of Tuberculosis in Somaliland and Somalia—As a standalone or integrated or mixed—steps:

| Formula 1= | [Political will/Safety Awareness100% + Effective NTP + Country Owned Sound TB plans/strategies/goals] x [Partnerships based on Mutual respect among TB Stakeholders] 100%(Shared vision + Stewardship + Resource mobilization + Good Governance /Transparency + Productive Collaborative Efforts] x [now and then (detection rate 100%+ halting containment and reversing of the epidemic 100%)] x [find, treat and Cure100% of New and old patients with TB/MDR-TB + 100% Monitoring of Drug compliance/ Adherence + Drug Quality Assurance100% + Zero % stockout for 2nd line Drugs] x [Availability of the Recently approved Anti-TB Drugs] x [(Proper Staff/public safety100% (IC 100% + MDR-TB Medical Waste Mngmt/Disposal system 100%)] x [Data-for- Decision Making 100%] x [100% M&E and Reporting] |
Formula 2 = [Independent TB/MDR-TB and MDR-TB/HIV Coinfection Surveillance and research systems 100%] x [Proven Best practices that is internationally field tested from elsewhere needs to be adapted and Implemented locally at least in Somaliland for better Management in all aspects The TB Control program including data of the TB-HMIS of Somaliland by the Somaliland NTP/MoH—One of such tools is e-TB Manager which is an Open source technology Solution.

Formula 3 = (Diagnotics needs to be scaled up (LED Microscope + GeneXpert) for better and enhanced Detection rate of MDR-TB

Formula 4 = The two newest drugs approved Bedaquiline and Delamanid that are available through donations—needs to be accessed, utilized and Implemented responsibly with strict protocols.

TOWARDS THE SOLUTIONS AND OPTIONS

= Formula 1 + Formula 2 + Formula 3+ Formula 4 + Formula X +-------------------So and so forth

Sincerely Yours,

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REFERENCES:


5. http://applications.emro.who.int/dsaf/EMROPUB_2014_EN_1792.pdf?ua=1
