Civil Society Collaborating

to Provide Integrated Noncommunicable Disease / Sexual and Reproductive Health Service Delivery in Barbados

REPORT OF HEALTH SYSTEMS STRENGTHENING SMALL GRANTS PROJECT SEPTEMBER 2017







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Introduction

In April of 2016, the Barbados Family Planning Association (BFPA) and the Barbados Diabetes Foundation (BDF) embarked upon a collaborative effort to integrate noncommunicable disease (NCD) services into existing sexual and reproductive health (SRH) services at the community level, providing client access to comprehensive healthcare. Established in 2011, the BDF is dedicated to improving health outcomes of individuals with diabetes through the delivery of self-management education and support. To ensure efficient long-term management, the Foundation's clinical practices are evidence-based and follow international guidelines. In 2014, the Foundation opened the Maria Holder Diabetes Centre for the Caribbean – a significant achievement. The BFPA is among the oldest civil society organisations in Barbados, established by an Act of Parliament in 1954. The Association has a long-standing commitment to provide individuals with equitable access to 'best care' SRH healthcare services, and comprehensive sexuality information and education.

This civil society collaboration sought to achieve recommendations from the World Health Organisation (WHO): to include the prevention and control of NCDs in other programmatic areas ^[1]. The UN Secretary-General's Global Strategy for Women's and Children's Health further supported the need to address women's health needs beyond SRH, and include non-reproductive health - most importantly NCDs. Against the background of a national NCD epidemic with 44 percent of women having hypertension and 1 in 5 adults living with diabetes ^[2], the BFPA identified gaps in their existing services primarily related to screening and referral for NCDs. The BFPA reached out to the BDF to explore a partnership to pilot a project, which would allow for integration of the BFPA's suite of SRH services and the BDF's diabetes screening programme. The primary objective of the pilot project between BFPA and BDF was to integrate diabetes mellitus care and family planning services. The collaboration had four key pillars: to effectively deliver health services; to exchange protocols; to create a referral system; and lastly to build a robust health information system to improve service and financial efficiency. The lessons learned from the pilot would be used to inform possible next steps, such as the formalisation of the relationship and the potential expansion of the partnership to include other local healthcare service providing NGOs e.g. Barbados Cancer Society and Cancer Support Services.

Sexual and reproductive health

Reproductive health is defined as "a state of complete physical, mental and social wellbeing and not merely the absence of disease or infirmity, in all matters relating to the reproductive system and to its functions and processes" ^[3].

Sexual health is defined as "a state of physical, emotional, mental, and social wellbeing in relation to sexuality; it is not merely the absence of disease, dysfunction, or infirmity" ^[3]. The term 'sexual' together with 'reproductive' – sexual and reproductive health (SRH) recognises that healthy sexual behaviour is a determinant of good reproductive health. Since the 1994 International Conference of Population and Development in Cairo, SRH has attracted interest in the public health field ^[3]. The United Nation's Millennium Development Goals (MDGs) supported SRH as a global health priority; targets to reduce maternal mortality and achieve universal access to reproductive health formed MDG 5: To improve maternal health ^[4]. As the era of MDGs ended, to continue efforts to advance SRH, the United Nations Global Strategy for Women's, Children's and Adolescents' Health, 2016 – 2030 was developed ^[5].

Research has indicated that reproductive health at all stages of life has a profound impact on adult health in advanced age, and therefore SRH is of importance for both males and females from birth to death.

Noncommunicable diseases as an emerging health priority

Over the last few decades, the global health landscape has evolved. NCDs – the four major groups being cardiovascular diseases, cancers, chronic respiratory diseases and diabetes – have emerged as the leading cause of death. NCDs share four modifiable behavioural risk factors: unhealthy diet, physical inactivity, tobacco use and harmful use of alcohol.

As younger populations become more vulnerable to these aforementioned behaviours, NCDs can no longer be classified as diseases only of the elderly. Premature deaths – deaths between the ages 30 and 70 years – are rising at alarming rates in low-income and middle-income countries (LMICs), undercutting productivity and presenting significant socio-economic development challenges ^[8].

Mapping the disproportionate burden of NCDs reveals that populations in high-income countries are no longer predominantly affected. Globalisation of unhealthy lifestyles and limited resources to meet the mushrooming costs related to NCD prevention and treatment has resulted in markedly higher rates of NCD morbidity and mortality in LMICs ^[6]. Small island developing states (SIDS), such as those found in the Caribbean and the Pacific are also particularly vulnerable to NCDs. In Barbados, NCDs are estimated to account for 84 percent of total deaths ^[7]. Adopted in 2011, the United Nations Political Declaration of the High-level Meeting of the General Assembly on the Prevention and Control of Noncommunicable Diseases defined a united global commitment to address NCDs^[8]. To ensure Member States translated such commitment into concrete action, the World Health Organisation (WHO) Global Action Plan for the Prevention and Control of NCDs. 2013 – 2010 was endorsed^[9]. Given the staggering global burden of NCDs, prevention and control of this class of diseases was recognised as central to economic growth and development and thus included in the 2030 Agenda for Sustainable Development. Target 3.4 as part of Goal 3 reads, 'By 2030, reduce by one third premature mortality from noncommunicable diseases through prevention and treatment and promote mental health and wellbeing' [10].



Integrating noncommunicable disease and sexual and reproductive health services

A shift in NCD service delivery is urgently needed to attain the global "25*25" NCD targets and the 2030 Agenda for Sustainable Development.

Vertical health programmes – addressing specific diseases in a top-down manner – should be translated into horizontal health programmes via integration of NCD services, thereby allowing multiple health issues to be addressed simultaneously. Benefits of integration include patient-centered as opposed to disease-centered services, allowing for synergistic management of patients' symptoms and reducing the stigma associated with specific disease programmes. Collaborative healthcare yields cost savings for the patient, while making more efficient use of limited resources and enabling better time management for patient consultations and other services ^[1].

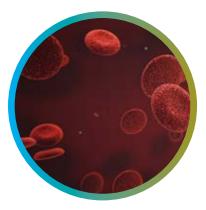
Substantial global progress has been made in improving access to SRH services and reducing negative SRH-related health outcomes ^[11]. In the Caribbean region, maternal mortality ratio (MMR) declined by 37 percent between 1990 and 2015 ^[12]. However, such services have rarely expanded to address NCDs, despite the linkages and interconnectedness between NCDs and SRH. The MDGs failed to realise the need for a more comprehensive life-course approach to women's health, outside of the sphere of SRH and in the face of a changing global disease burden; thus contributing to the shortfall in achieving MDG 5^[4]. In the context of the growing NCD burden on increasingly younger populations, the demand on health systems to manage NCD-SRH co-morbidities will rise. Existing well-developed SRH services, such as antenatal care, gynaecological care, HIV clinics, infertility clinics and family planning services offer opportunities to provide primary and secondary prevention for NCDs, especially for most vulnerable populations including the poor, the uneducated and the disenfranchised.

Notable SRH and NCD action platforms have been initiated; however, efficient and successful integration continues to be a challenge highlighting the need for greater identification and exploration of models of good practice. In many settings, primary and secondary NCD and SRH prevention are provided in communities most in need through civil society organisations. Collaboration within the civil society space between service-providing civil society actors presents a unique opportunity to integrate NCD and SRH primary and secondary prevention services; and increase income generating opportunities for resource constrained NGOs.

Integrated noncommunicable disease-family planning services

The primary objective of the collaboration between BFPA and BDF was to integrate family planning services and diabetes mellitus care. Integrated NCD-family planning services include: education, information and communication (EIC); prevention screening and vaccination; and early treatment, management and care. NCDs and SRH are crosscutting, sharing risk factors for adverse health outcomes; thus, EIC aimed at supporting health-related behaviour change can simultaneously address both health challenges. The integration of the services also provides an SRH entry point for males seen in the diabetes prevention and treatment health care clinics and who are traditionally underrepresented in SRH services.

Integrated noncommunicable disease-family planning services



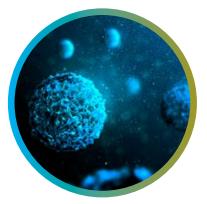
DIABETES

Diabetes carries the risk of serious health complications: cardiovascular disease (CVD), kidney failure, blindness and limb amputation; both men and women with diabetes mellitus typically have shorter life expectancies. Diabetes has direct consequences on both male and female SRH, reducing fertility and associated with a higher occurrence of genital infections. Male diabetics may suffer with erectile dysfunction and testosterone deficiency ^[13]. Female diabetics may experience vaginal dryness and pain during intercourse. The effects on female reproductive health are profound, and cyclical hormonal changes make diabetes control more difficult in women ^[14]. Women with diabetes have difficulty in conceiving, with higher risk of spontaneous abortions and generally poor pregnancy outcomes. Diabetes whether pre-existing type 1 or type 2 diabetes mellitus (T1DM or T2DM) or gestational diabetes mellitus (GDM) - during pregnancy presents serious medical complications, threatening the health of both mother and foetus. Offspring born to mothers with uncontrolled diabetes have an increased risk of becoming obese and developing early-onset diabetes, than their non-diabetic pregnancy siblings ^[15]. It is therefore vital that prior to pre-conception, women receive prevention education and screening to identify pre-existing diabetes. Diabetic women should have access to intensive preconception care to effectively manage the disease.



OVERWEIGHT AND OBESITY, TOBACCO USE AND ALCOHOL CONSUMPTION

Overweight and obesity are significant challenges in Barbados where approximately 34 percent of the population is obese (BMI \geq 25 kg/m2) and projected to rise [7]. Obesity - an indicator of physical inactivity and unhealthy diet - is a significant contributor to the global burden of NCDs - including certain cancers, diabetes and coronary heart disease [6]. Attention should be directed to obese women of reproductive age; infertility and pregnancy-associated mortality rates are greater among obese women than normal-weight women. Further, it has been evidenced that high maternal BMI increases offspring risk of childhood obesity, and the premature development of NCDs ^[16]. Tobacco use is arguably the leading preventable cause of NCDs. Wide acceptance of tobacco-lung cancer relationship exists; however, the impacts of tobacco use on health extend to include oral and other cancers, hypertension and cardiovascular diseases. With regard to SRH wellbeing, tobacco use is a common cause of infertility among men and women. Maternal tobacco use, as well as exposure to second-hand smoke poses significant threat to the mother-developing foetus duo, increasing the risk of ectopic pregnancy, miscarriage, stillbirth, foetal growth restriction and congenital anomalies. The neonatal risk for sudden infant death syndrome (SIDS) is increased for those infants whose mothers smoked either during or after pregnancy ^[17]. Harmful use of alcohol, as a highrisk factor NCDs, can also impair judgement leading to unsafe sexual behaviour.



CANCERS

Family planning services provide an entry point for the prevention and control of reproductive cancers - in women breast and cervical cancers are the most common. Cervical cancer is the second leading cause of cancer-related death among Caribbean women, accounting for 9.5 percent of total deaths related to cancer ^[18]. Cervical cancer is largely preventable through screening and the practice of healthy sexual behaviour - highrisk sexual behaviour puts women at risk of infection with Human Papilloma Virus (HPV), which can lead to cervical cancer - situating this type of cancer at the crossroads of SRH and NCDs. One of WHO's 'Best Buy' NCD preventative interventions is cervical screening using Visual Inspection of the Cervix by Acetic Acid (VIA), followed by pre-cancerous lesion treatment [19]. A case study in Kenya illustrates the possibilities for integrating cervical cancer screening with family planning services. In this low-resource setting, the VIA screening strategy was utilised. Prevalence of cervical dysplasia and suspicion of cervical cancer among those family planning clients screened was 16.9 percent and 0.9 percent, respectively. Those identifiable high-risk clients were referred for further evaluation and treatment ^[20]. To protect girls and young women against HPV infections, the delivery of the HPV vaccination in such an integrated setting as a relatively low-cost intervention is being explored [21].



CARDIOVASCULAR DISEASE

Family planning programmes also provide an avenue for screening for CVD risk factors. Globally, CVDs are a major killer. In Barbados, CVD premature mortality rates in women and men are 29 percent and 24 percent, respectively ^[22]. Despite having a higher mortality rate and increased incidence of stroke related complications, compared to men, women are likely to receive less adequate preventative screening and appropriate treatment. To optimise the health of women of reproductive age, and improve pregnancy outcomes, some family planning clinics routinely screen women receiving family planning services for CVD risk factors such as: hypertension, high cholesterol, smoking and obesity. Women who screen positive and require further medical care are then referred onto appropriate services^[23].

Lessons learned and recommendations

In assessing their services, findings indicated that the BFPA was certainly more apt to responding to clients' sexual and reproductive health needs, while the BDF was in the best position to provide guidance to clients diagnosed, or at high-risk of developing diabetes mellitus.

The collaboration confirmed that based on the needs of their clients, there are inextricable synergies between NCD and SRH programmes.

In identifying the areas of collaboration in health service delivery, a database was designed to record and link the services, which were agreed to be mutually inclusive in the scope of SRH, and diabetes. This further led to the understanding that there needed to be protocol standardisation relating to both health domains and the agreed protocols were developed, exchanged and initiated.

A referral system was set up for those health needs deemed as primary specialist areas for each organisation. A client in need of either organisation's specialist services could easily and smoothly be facilitated by the other. It became apparent that the BFPA had a health information system that suited the needs and objectives of the partnership; while the existing BDF health information system required a detailed review exploring not only its capacity and priority gaps related to the database, but for their own service delivery and financial efficiencies. The BFPA was able to introduce and orient the BDF staff to their open electronic medical records (EMR) system, which met the BDF's current and future needs. The BDF has adopted the BFPA's EMR which will be adapted for their specific needs. The BFPA continues to support the process by providing training for all of the BDF's staff on using the EMR. The fact that both organisations will be utilising the same systems will allow for greater service and financial efficiencies, and deeper collaboration.



Conclusion

The Barbados Diabetes Foundation and the Barbados Family Planning partnership created a joint framework to facilitate the delivery of comprehensive NCD/SRH healthcare to clients. The collaboration provided the opporuntity to expand respective services beyond the realm of each organisations' specialist area, and to strengthen the service delivery system by sharing strategies to curb inefficiencies. The utilisation of twin information health systems, allowing for future exchange and sharing of client information sets a precedent for the replication of similar collaboration in NGO health information and healthcare service delivery systems beyond these initial organisations.

References

- 1. For more information on the inclusion of NCDs in other programmatic areas, see the WHO GCM/NCD Working Group (Working Group 3.1, 2016-2017) www.who.int/global-coordination-mechanism/working-groups/workinggroup-3-1/en/
- 2. The Barbados Health of the Nation Survey: Core Findings Policy Brief 1 (2015). http://www.archive. healthycaribbean.org/newsletters/aug-2015/CDRC_ HealthOfTheNationPolicyBrief.pdf
- 3. Glasier, A., et al. (2006). Sexual and reproductive health: a matter of life and death. The Lancet, 368 (9547), 1595-1607.
- 4. United Nations (UN) Millennium Development Goals 2000. http://www.un.org/millenniumgoals/
- Every Woman Every Child. The Global Strategy for Women's, Children's and Adolescents' Health (2016-2030). 2015. New York: Every Woman Every Child. http://www.who.int/ life-course/publications/globalstrategy-2016-2030/en/
- World Health Organisation (WHO), Global Status Report on Noncommunicable Diseases 2014. http://apps.who. int/iris/bitstream/10665/148114/1/9789241564854_ eng.pdf?ua=1
- 7. World Health Organisation (WHO) Noncommunicable Diseases (NCD) Country Profiles, 2014.
- 8. United Nations (UN) General Assembly resolution 66/2 http://www.who.int/nmh/events/un_ncd_summit2011/ political_declaration_en.pdf
- World Health Organisation (WHO), Global Action Plan for the Prevention and Control of Noncommunicable Diseases 2013-2020. http://apps.who.int/iris/ bitstream/10665/94384/1/9789241506236_eng.pdf
- United Nations (UN), Sustainable Development Goals: 17 goals to transform our world. http://www.un.org/ sustainabledevelopment/ sustainable-developmentgoals/
- 11. Snow, R.C., Laski, L., and Mutumba, M. (2015). Sexual and reproductive health: Progress and outstanding needs. Global Public Health, 10(2):149-173.
- Trends in maternal mortality: 1990 to 2015. Estimates by WHO, UNICEF, UNFPA, World Bank Group and the United Nations Population Division. http://www.unfpa. org/sites/default/files/pub-pdf/9789241565141_eng. pdf
- Mills, L. (2015). Sexual dysfunction in men with diabetes. Journal of Diabetes Nursing 19: 332–8

- 14. Diabetes: A Missing Link To Achieving Sexual & Reproductive Health In The Asia-Pacific Region. (2012). Asian-Pacific Resource & Research Centre for Women (ARROW). https://www.worlddiabetesfoundation.org/ sites/default/files/Arrow_DiabetesAMissingLinktoSRH. pdf
- 15. Dabelea, D. (2007). The predisposition to obesity and diabetes in offspring of diabetic mothers. Diabetes care, 30.
- Zera, C., McGirr, S. and Oken, E. (2011). Screening for obesity in reproductive-aged women. Prev Chronic Dis, 8(6), p.A125.
- 17. Centers for Disease Control and Prevention (US); National Center for Chronic Disease Prevention and Health Promotion (US); Office on Smoking and Health (US). How Tobacco Smoke Causes Disease: The Biology and Behavioral Basis for Smoking-Attributable Disease: A Report of the Surgeon General. Atlanta (GA): Centers for Disease Control and Prevention (US); 2010. 8, Reproductive and Developmental Effects
- 18. Globocan, IARC/WHO (2012).
- 19. World Health Organisation (WHO), From Burden to "Best Buys": Reducing the Economic Impact of Non-Communicable Diseases in Low- and Middle-Income Countries. http://www.who.int/nmh/publications/ best_buys_summary.pdf
- 20. Were, E., Nyaberi, Z., and Buziba, N. (2010). Integrating cervical cancer and genital tract infection screening into mother, child health and family planning clinics in Eldoret, Kenya. African Health Sciences, 10(1), 58–65.
- 21. Wigle, J., Fontenot, H. B., and Zimet, G. D. (2016). Global delivery of human papillomavirus vaccines. Pediatric Clinics of North America, 63(1), 81-95.
- 22. World Health Organisation (WHO), Barbados: Cardiovascular Diseases Profile.
- Robbins C.L., et al. (2015). Outcomes of Cardiovascular Disease Risk Factor Screening and Referrals in a Family Planning Clinic. Journal of Women's Health, 24(2): 131-137.

