Fiji Adolescent Health

Situational Analysis: 2016

Fiji Ministry of Health and Medical Services

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EXECUTIVE SUMMARY

The first section of Part A of this document describes the health needs of adolescents in Fiji, poorly described to date. It identified that Fijian adolescents experience an excess burden of poor health, which has not improved substantially over time. Communicable disease, under and over nutrition and poor sexual and reproductive health are common health needs for Fijian adolescents. Violence and unintentional injuries are important causes of preventable morbidity and mortality, particularly for males. There is also a very large burden of non-communicable disease, including chronic physical illness and mental disorder. Health risk behaviors including substance use, physical inactivity and sexual health risk were found to be common. These outcomes and risks relate to the disadvantage that many Fijian adolescents experience across the social determinants of health. Given many outcomes and risks share common determinants, comorbidity is likely to be common.

The second section of Part A of this document maps current programmes and approaches for adolescent health in Fiji. While many programmes relating to adolescent health were identified, there are a number of reasons why these programmes may not be resulting in improved health outcomes for adolescents. Firstly, it appeared that many programmes are not aligned with health needs of Fijian adolescents. Programmes for some health needs were absent (for example, mental health). Additionally, existing programmes did not always meet the needs of particular risk groups (for example, programmes relating to sexual and reproductive health largely catered for older and married adolescents). Secondly, programmes tended to focus on discrete issues and were poorly integrated and coordinated with other programmes, likely to introduce barriers for access. Thirdly, many programmes were funded for only short time periods, this sporadic funding likely to translate to sporadic programme delivery. Fourthly, programmes and approaches to adolescent health in Fiji remain poorly evaluated, their reach and effectiveness largely unknown (introducing barriers to taking these programmes to scale). Finally, current approaches to adolescent health in Fiji largely exist in a legislative context that is restrictive to addressing many key needs of adolescents.

Part B considers the needs of adolescents and the strengths (and limitations) of existing programmatic approaches to recommend an adolescent health strategy for Fiji. The strategy includes recommended actions, with some guidance around implementation provided, further detail for indicators and actions will be determined during the Ministry of Health stakeholder meeting on 7th November 2016.

Part A: Fiji Adolescent Health Situational Analysis

1. INTRODUCTION

Over the past decade there has been significant investment in strengthening child health programmes and services in Fiji. This has brought improved health outcomes for neonates, infants and children. However to date, there has been less investment in the health and wellbeing of adolescents. Adolescents and Youth (10 to 24 year olds) make up almost one third of the population of Fiji.[1] They are the leaders, parents and citizens of the future. Understanding and investing in adolescent health and wellbeing may: consolidate gains made in child health; help drive socioeconomic development; address risks of non-communicable diseases (NCDs) (particularly tobacco smoking, the obesity epidemic and substance use); and assure the best start for the next generation.

The current Fiji National Strategic Health Plan aligns with the United Nation's Sustainable Development Goals (SDGs), with a focus on improving outcomes for maternal, child and adolescent health. The Ministry of Health and Medical Services (MoHMS) have now requested that a situational analysis of adolescent health be undertaken to inform the development of a strategy and implementation plan with locally specific and feasible direct actions and indicators for adolescents in Fiji.

1.1. PURPOSE OF THIS DOCUMENT

The purpose of this document is to provide the MoHMS and other government Ministries and their partners with a concise review and analysis of the health needs of adolescents in Fiji. The focus is on physical and mental health (including sexual and reproductive health, mental disorder and substance use, nutrition and rheumatic heart disease). Some relevant social determinants are highlighted (particularly education and employment), as these are important drivers for adolescent health and wellbeing.

1.2 STRUCTURE OF THIS DOCUMENT

This document has three main sections:

1. The identification of priority health needs for adolescents in Fiji;

2. Defining what actions (policies/ programmes/ interventions/ platforms) exist and mapping these against identified adolescent needs; and

3. Providing a strategy and implementation plan to improve adolescent health and well-being (Part B).

1.3 BACKGROUND AND CONTEXT

1.3.1 NEW GLOBAL UNDERSTANDINGS OF ADOLESCENT HEALTH

Adolescence is now recognised as a critical developmental phase with great opportunities for health and development. It is also a life phase that brings unique vulnerabilities. A healthy adolescence provides the foundation for health across the life-course, and ensures a health start to life for the next generation.[2]

Puberty and physical growth have long been recognised as defining the onset of adolescence. The end of adolescence has often been defined as a transition in social role from a dependent child to an independent adult. Improving access to education and changing social norms relating to relationships and families has meant that the end of adolescence is being delayed for many young people across the globe. We are also increasingly understanding the importance of neurodevelopment well into the mid 20s. As a result, an age range of 10 – 24 years more reliably captures these important developmental transitions, and is increasingly used as a definition of adolescence.[3] Of note, while the concept of adolescence and adulthood may vary considerably between cultures, the biological, neurocognitive (and increasingly social context) is a human universal.

Our improved understandings of neurocognitive maturation help understand the vulnerability of adolescents. The limbic regions of the brain (which are responsible for emotion and reward) typically mature in early to mid-teenage years, whereas the frontal cortex (responsible for higher executive function) develop towards the end of the teenage years to the early 20s. These developments coincide with a window of vulnerability where adolescents are particularly susceptible to peer and media influences and are likely to experiment with substances. It also coincides with an increase in the risk of poor health relating to substance use, mental disorder and poor sexual health.

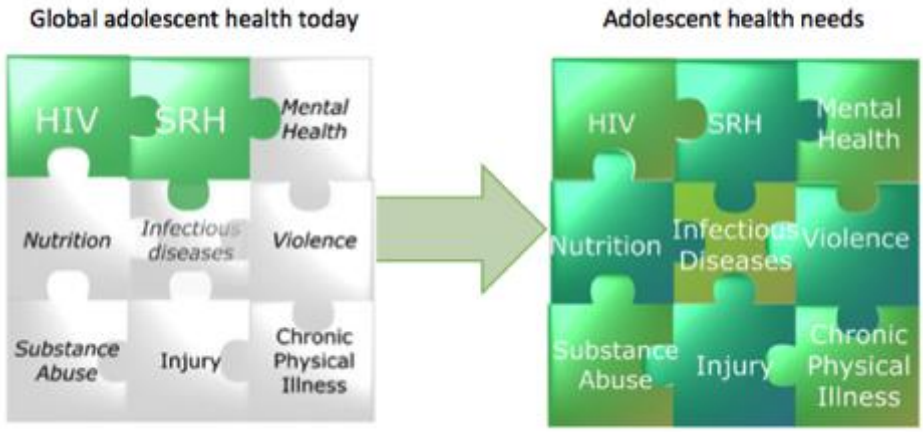
To date, adolescent health programming has largely focused on sexual and reproductive health (SRH) and Human Immune Deficiency Virus (HIV). However, the health needs of adolescents are much broader (Figure 1). Communicable diseases remain common in this age group. Injury and violence are important preventable causes of poor health. Adolescents are also increasingly burdened with chronic illness, including mental disorder and substance abuse. Moreover, many of the antecedents for future health conditions (such as substance use disorders, type 2 diabetes) arise and are potentially modifiable during adolescence.

The Global Strategy on Women's, Children's and Adolescents' Health (2016 – 2030) highlights adolescent health as a global health priority.[4, 5] Aligned with the SDGs, it has three key objectives:

- survive (ending preventable deaths);
- thrive (ensuring health and wellbeing); and
- transform (expanding enabling environments).

A key recommendation of the Global Strategy is universal health coverage, which includes the provision of essential health services (health promotion, prevention and treatment without introducing financial stress). Universal health coverage is particularly relevant to adolescents given they often experience many barriers to accessing care.

Figure 1: A broader lens for viewing adolescent health



Source: Patton et al Lancet 2016 (with permission from the authors)

1.3.2 THE CONTEXT IN FIJI

Demography

The Republic of Fiji consists of 322 islands, of which 110 are inhabited. Fiji lies within the Pacific Ocean and is classified as an upper-middle income country. [1] Fiji's population was 837,231 (2007 Census), with current population estimates of 902,000.[1] Fiji's population primarily consists of Indigenous Fijians (57%), known as iTaukei, who are predominantly Melanesian, and Fijians of Indian descent(38%). The remaining proportion of the population is made up of other Pacific Islanders, mixed race, Chinese and Europeans. At the time of the 2007 census, 49.3% lived in rural areas.[1] There has been rapid urbanisation of the Suva periurban area, particularly in the area of Nasinu in the Suva-Nausori corridor, with many living in crowded squatter settlements with limited access to water and sanitation.

Seventy percent of the population is aged less than 40 years. There are estimated to be 233,456 adolescents aged 10-24 years in Fiji (at time of the most recent Census); making up ~28% of the total Fijian population (Table 1). The annual number of births in Fiji is approximately 18,000-20,000, with approximately 6% of births to adolescents aged less than 18 years.

[1] http://hdr.undp.org/en/countries/profiles/FJI

Table 1: Fiji Adolescent Population (2007 Census)

	10-14 years (%)	**15-19 years (%)**	**20-24 years (%)**
Male	42,369	40,018	41,325
Female	40,015	30,700	39,027
Total	**82,386 (9.8)**	**70,718 (8.4)**	**80,352 (9.6)**

Source: FiBOS accessed October 2016

The adult literacy rate is estimated to be 93% with English as the official language, and Fijian and Hindi are the native languages of the two major ethnic groups.[6] The primary school attendance rate is estimated to be 98%, however lower attendance has been reported in some rural areas, and historically attendance had declined through secondary school.[2] Of the estimated 49.3% of the population living in rural areas, many live on small islands with small populations, which present many challenges in delivering basic services and communication. Remoteness from major markets, expensive and infrequent transport links and very high exposure to natural disasters makes service delivery difficult and economic opportunities scarce. (AusAID country strategy 2011-14)

Fiji is vulnerable to instability, including political tensions, changes in global demand and natural disasters, which are significant risks for the poor (security of assets and income and food and fuel price increases make the poor particularly vulnerable). Fiji's economy was hit hard by the 2000 and 2006 coups, the global downturn and higher import prices, with negative impacts on the poor. Fiji was recently rated the 19th most vulnerable country in the world to natural disasters. (World Risk report 2011) Since 2009, the country has experienced extensive flooding (2009 and 2012), drought (2010), Cyclone Tomas (2010), typhoid outbreaks (2009 and 2012) and Dengue fever (2013-14) and most recently flooding and the devastating Cyclone Winston in February 2016.

Key Health Issues for Fiji

Fiji is faced with a triple burden of disease: the ongoing burden of communicable diseases and emergent burden of non- communicable diseases (NCD) and injuries. The NCD burden in Fiji and the Pacific region has been termed a crisis. Fiji continues to experience alarming increases in health risk factors (including obesity, raised blood pressure, raised blood glucose, and alcohol consumption) and in the overall health burden from NCDs. Analysis of deaths in the last five years highlighted underlying causes from delayed presentation (which was often linked to poverty, low levels of education) and pre-existing cardio-vascular

[2] http://www.unicef.org/infobycountry/fiji_statistics.html

problems (including rheumatic heart disease (RHD), and other NCDs. There is a need for an improved multi-sectoral approach to risk management and resilience for communicable diseases, health emergencies, climate change and natural disasters. There is a need for an improved multi-sectoral approach to risk management and resilience for communicable diseases, health emergencies, climate change and natural disasters.[3] The MoHMS, through the Wellness Unit, delivers programmes with a focus on prevention to combat the increase in NCDs.

Key Health Policies

Ministry of Health and Medical Services National Strategic Plan Indicators 2016-2020

The MoHMS Strategic Health Plan outlines how it will address crucial health and health related issues in the country over a five-year period. The 2016-2020 National Strategic Health Plan (NSP) has two strategic pillars: 1. Provision of health services to the community and 2.Health Systems strengthening. Each of these pillars have key priority areas. Priority area two specifically addresses adolescent health. However, all priority areas are directly relevant to the development of adolescent preventative and curative services in Fiji (Appendix 6). Maternal health initiatives have been undertaken to facilitate a greater awareness of the need for regular antenatal care (ANC) visits, including the Safe Motherhood Initiative, the new parent-held Maternal Child Health (MCH) Card and health information resources that target vulnerable and at-risk groups. There has been strong and continued investment in high quality, evidence based, training of all cadres of health professionals in the health system. This aims to enhance the continuum of care and improve the management of maternal, neonatal, child and adolescent health. The reinvigoration of and investment in strengthening the CHW programme over the past five years in Fiji has seen the development of a series of training modules and manuals for CHW's aligning with the MoHMS's Wellness life course approach. Since the 2010 Child Health review there has been significant strengthening of child health services including Integrated Management of Childhood Illness (IMCI), training in neonatal care, paediatric life support, improved referral and review systems and twinning projects to support specialist services e.g. Oncology at the three divisional hospitals.

Ministry of Health and Medical Service Divisions

The Wellness Unit was established in February 2012 by the merging of NCD control unit and the National Centre for Health Promotion (NCHP).

The Wellness Conceptual framework: *"Wellness Fiji is a state of optimal and balanced well-being of body, mind and spirit oriented towards maximizing an individual and community's potential maintained at every stage of development. Through several multi-sectorial consultations at national and divisional levels the definition and drive for Wellness Fiji was devised to reflect the Ministry's quest to impute wellness concepts in the delivery of health*

[3] Fiji MoHMS National Strategic Plan 2016-20

services; address Fiji's triple burden of diseases; build sustainable enabling environments; develop a policy framework to promote wellness and advocate for choices and practice that will prolong healthier lives for all Fijians." [4]

Current understandings of adolescent health in Fiji

There is a strong interest from the MoHMS in improving adolescent health and wellbeing in Fiji. However adolescent health needs are poorly understood and ill-defined, particularly in the area of mental health. Adolescent Reproductive Health (ARH) is a key component of the National Reproductive Health Programme, which is part of the MoMHS Public Health Programme. Adolescent reproductive health is reflected in the National Strategic Plan, Annual Corporate Plan, and the Reproductive Health Policy. It is also incorporated into the divisional and sub-divisional business plans with the aim that implementation takes place at these levels. The Family Health programme's key aims are to manage, implement, monitor and evaluate programs pertaining to Child Health, Maternal Health, HIV/STI‟s, Reproductive Health and Gender. Many non-government organisations NGOs) have a focus on adolescents. Adolescent health services and programs, although some exist, appear to be delivered in an isolated and ad hoc manner and coverage is not well defined.

[4] The Wellness Conceptual Framework. Version 7. 2014

2.0 HEALTH NEEDS FOR ADOLESCENTS IN FIJI

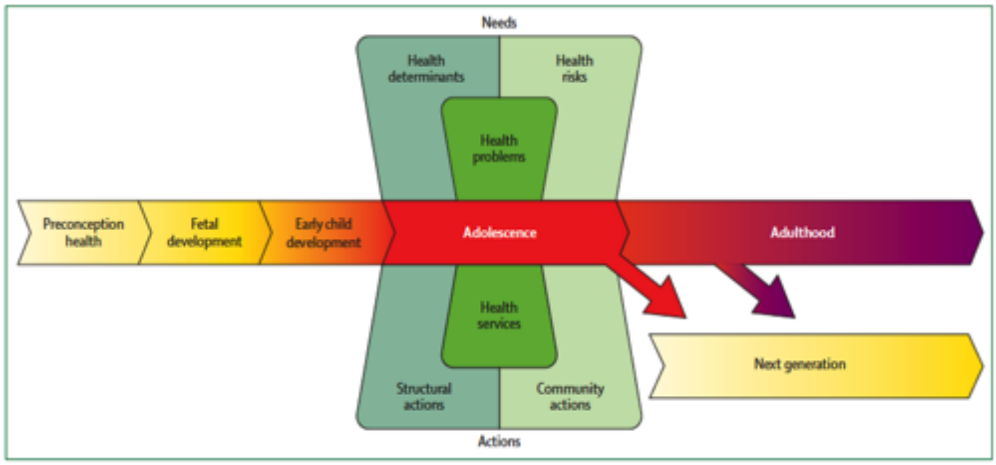
2.1 METHODS

2.1.1 REPORTING FRAMEWORK

To define the needs of adolescents, a conceptual framework recognising adolescent health within the life course was adopted (Figure 2). This framework includes:

1. Structural determinants including socioeconomic (housing/homelessness, education, justice, child labour etc) and policies (access to health services, access to contraception, legality of early marriage, child protection etc), health risks for adolescent health, future health and intergenerational health (health behaviours such as substance use, physical activity etc, health states (or intermediate outcomes) such as obesity or metabolic syndrome); and
2. Health outcomes (diseases, injuries and causes of mortality);
3. Responses or actions to these needs: health services, community actions and broader structural actions.

Figure 2 A Conceptual Framework for Adolescent Health



Source: Patton et al. Lancet 2016 (with permission of the authors)

Priority domains within these areas were defined by considering: stakeholder advice; current policy documents and indicators; and modeled data from the Global Burden of Disease study (GBD 2013). Stakeholder consultation took place between August and September 2016. Interviews were undertaken nationally with key MoHMS, Ministry of Education and Ministry of Youth and Sport officials, partner organisations and NGOs (Appendix 2). Data were reviewed from current policies, published papers, reviews, and reports (Appendix 3). Additionally, this was supplemented by findings from the GBD2013 study relating to adolescents in Fiji to identify the leading causes of healthy life lost due to disease and injury.[7] Appendix 4 details the development of the reporting framework, summarised below in Table 1.

Table 1 Summary of the reporting framework

Social and structural determinants
Policies and legislation as they relate to adolescent health
Environmental, including water and sanitation, climate change
Education
Employment
Poverty
Food Security
Housing
Community and home safety, including child protection
Social infrastructure including access to transport
Justice
Youth participation and engagement
Health risks
Substance use: alcohol, tobacco cannabis, glue sniffing, home made alcohol, kava
Physical inactivity
Nutrition: obesity, overweight, malnutrition
Iron deficiency
Sexual risk: early sexual debut, condom use
Health outcomes
Adolescent mortality
Communicable, maternal and nutritional diseases
Sexual and Reproductive Health (SRH) and Sexually Transmitted Infections (STI)
Respiratory: pneumonia and asthma
Vaccine preventable diseases
Vector borne diseases
Skin diseases and scabies
Intentional and non-intentional injuries
Gender based violence
Assault/ domestic violence
Unintentional injury
Motorised vehicle injury
Chronic disease including mental disorder and substance abuse
Mental health: self harm, stress, anxiety, depression, psychosis
Suicide
Rheumatic heart disease
Oral health
Diabetes
Disability

3.0 FINDINGS

3.1 POLICIES

There are a number of Governmental and Ministerial Decrees, Policies and Strategies relating to Adolescent Health and well-being, these are outlined in**Error! Reference source ot found.**. Ministerial Decrees are written into law and provide the government requirement for defining key policy and strategy areas. New Polices and Strategies developed in 2015 with adolescent health actions and indicators include the School Health Policy, the Mental Health Strategic Plan and Policy and the Rheumatic Heart Disease Policy.

Table 2 Policies, Strategies, Guidelines relating to adolescents

	Decrees	**Policies**	**Strategies**
Youth/ cross cutting	Crimes Decree Juvenile Act Child Health Decree Domestic Violence Decree (2009) Family Law Amendment Decree (2012) Pubic Health Act (Cap III)		
SRH	HIV Decree	SRH policy 2011 HIV Testing and Counselling Policy HIV Policy 2012	SRH strategy 2012
Mental Health	MH Decree 54 (2010)	National MH and Suicide Prevention Plan & Policy 2015	
Child Protection	Child Welfare Decree 2010 Crimes Decree	Intersectoral CP agreement: UN, NGOs, Ministries 2016	
Nutrition	Food Safety Act 2003 and Food Safety Regulations 2009	School Canteen Policy Breastfeeding Policy School Health Policy 2016	Expanded Food Voucher Programme
NCD/ RHD		RHD Policy 2015	NCD strategic plan
Tuberculosis			TB strategic plan 2015-20
Immunisation		EPI policy	
Disability			Strategy in draft

Key legislation as it relates to adolescent health

Box 1 provides information on intersection of adolescent rights and access to health service in relation to current Fiji legislation.

Box 1: Key legislation as it relates to adolescent health

Health Domain	**Existing legislation**
SRH	Sections 172-174 of the Penal Code of Fiji (cap. 17) prohibit entirely the unlawful performance of abortions. Section 234 of the Code, however, makes an exception in the case of a threat to the life of the pregnant woman. It states that a person is not criminally responsible for performing in good faith and with reasonable care and skill a surgical operation, upon any person for his benefit, or upon an unborn child for the preservation of the mother's life, if the performance of the operation is reasonable with regard to the patient's state at the time and to all circumstances of the case. In addition, in a decision of the Supreme Court of Fiji (Emberson v. Emberson), Criminal Case No. 16 of 1976, the Court further clarified the law by specifying that abortion was permitted when the performing physician had formed an opinion "in good faith" that the abortion was necessary to preserve the pregnant woman's mental and physical health, "taking into account the social circumstances of the patient". Thus, in practice the law is interpreted very liberally. An abortion may be performed on the grounds of foetal deformity, rape or incest as they may be interpreted as producing a risk to the woman's mental health; it may also be performed in cases of economic duress.
	Child Welfare Decree (2010) 3.1 "child" means a person below the age of 18 years
Injury	Child Welfare Decree (2010) 2.0 The purpose of this Decree is to: a. ensure mandatory reporting of cases of possible, likely or actual harm in relation to events discovered by a professional in affecting the health and well-being of children. b.emphasise the duty of care of professional in handling cases of possible child abuse and outlining the reporting requirements of such cases in their care and, c. to protect the confidentiality and integrity of cases and of the professionals handling these cases

3.2 SOCIAL DETERMINANTS

Environment, climate, water, sanitation and hygiene

Climate change is projected to increase the severity of extreme weather events including increased rainfall, flooding and cyclones in the Pacific Islands, such events have been associated with increased leptospirosis, typhoid, diarrhoeal and skin disease cases.[8] Population health data relating to environmental change is limited. It was however a

common theme identified at stakeholder consultation. Many homes and schools, particularly those in rural and remote locations, do not have a reliable or safe water supply, or proper ablution blocks. Poor water and sanitation facilities within schools contribute to the spread of communicable diseases e.g. typhoid among young children. The poor state of school infrastructure and water/sanitation facilities have the potential to undermine financial assistance to encourage school attendance and retention.[5]

Education

Primary school enrolment rates are high (> 95%%.) About 91% of adolescents progress to secondary school (2012), with higher progression percentages for females (97%) compared with males (91%).[6] For rural settlements travel is both expensive and time consuming to attend secondary school. The high cost and lengthy travel time are a considerable disincentive for children to remain at school. It is recognised that the longer it takes to get to secondary school, the fewer the proportion of people who complete primary and secondary school.[7]

Employment

Data from the International Labour Organization (ILO) indicates that the labour force participation rate was 59% in 2014, which is relatively low for Pacific Island countries where the regional average was 65.6%. The unemployment rate among young people aged 15-24 was 18.2% compared with ~13.1% for the Pacific region, and represents nearly 11,000 unemployed young women and men. The unemployment rate for youth is 4.7 times that of adults. The youth unemployment situation is more concerning for those with higher levels of educational attainment. In 2010/11, the unemployment rate for young people with levels of post-secondary education was 20.7%. The unemployment rate for young people with a secondary diploma is 15.6% and 12.1%, respectively. It also points to skill and qualification mismatches in the economy. For working youth, around 40% were employed in a job that did not match their educational level, so young people are migrating in pursuit of employment opportunities abroad and contributes to the so called “brain-drain”. While controlling for differences in demographic characteristics and industry and occupation of employment, wages were 14% higher for a secondary school graduate compared with an employee with only a primary school education, and 50% higher for post-secondary schooling. [9]

There has been an increase in the number of vocational and technical training institutions in recent years, providing more places for young people to undertake training and transitioning to paid employment. Data on the numbers of graduates from vocational training courses and employment ascertainment was not sourced.

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[5] Fiji Access to Quality Education Program (AQEP) Framework.DFAT Australia. 2010

[6] World Bank data 2011 http://data.worldbank.org/indicator/SE.SEC.ENRR

[7] Fiji AQEP Framework. 2010. DFAT Australia

Women earned around one-third less than men, pointing to labour market constraints and highlighting the untapped potential of women. There is evidence that the gender gap has been worsening with women being more likely to enter informal work and subsistence activities. The rate of informal employment in rural areas (78.7%) was nearly double compared with urban areas.[9]

Child labour

The legal age for employment in Fiji is 15 years of age. The ILO, Save the Children Fund, the Fiji Trades Union Congress and other NGO partners have recently undertaken five Child Labour Research Surveys.[10] These surveys established that there are an increasing number of children involved in child labour. Over 500 children involved in the worst forms of child labour in Fiji were interviewed: 109 children were engaged in commercial sexual exploitation, in particular in child prostitution (the use of girls and boys in sexual activities remunerated in cash or in kind, otherwise referred to in this report as 'sex work'). Although the majority of respondents started sex work between the ages of 15-16 years, the Commercial Sexual Exploitation (CSE) of Children Survey also found that some children started sex work as early as 10 years old. Children who live with extended families, suffer parental neglect, who live in violent households and who have been victims of physical and sexual abuse are very vulnerable to this form of exploitation. There were some cases of children involved in drug trafficking and begging. Specific research on the trafficking of children for commercial sexual exploitation and child sex tourism is needed.

Seventy-five percent of the children participating in the Street Children Survey were reported to be in work they considered to be hazardous and 26.1 % of children participating in the Informal & Squatter Settlement Survey stated that they were engaged in hazardous work. In addition, 55 % of children participating in the Rural Agricultural Survey reported that their working conditions were hazardous. Hazardous work identified by these children included working with heavy machineries and pesticide sprays, collecting scrap metal and carrying loads ranging from 20kg to 50kg. Children also reported working very long hours (some over 12 hours per day). Children who work on the streets may work from 6am to 12 midnight, and children providing seasonal labour or working during peak periods such as weekends or during major events also work very long hours.

Other industries that have been reported for using child labour are the cane, farming, fishing industries and also trading food e.g. beans or roti on the streets in towns. The Ministry of Trade and Tourism works with the ILO to define policy and regulations and enforce child labour laws.

Financial Poverty

Data specific to adolescents are limited. The aggregate Incidence of Poverty (percentage of population below the Basic Needs Poverty Lines) was 35% in 2002-03 and 31% in 2008-09. There was an overall decline in the incidence of poverty between the two Household Income Expenditure Surveys undertaken in the past decade. [6] However, where Fiji was once on track to meet global targets to eradicate poverty by 2015, it is now higher than it was in 2002 with an estimated 40% of the population living below the basic needs poverty line of less than AU$3.30 per day.[11, 12] Areas reliant on sugar production have suffered marked

declines in income due to the reduction in preferential pricing of sugar to the European Union. This has been exacerbated by migration to urban areas as people search for higher wages employment and better services. However, with 20% of the population living in the peri-urban fringe, health services have failed to keep up with demand from the rapid influx of rural migrants.[8] A report released in 2015 titled *Child Sensitive Social Protection in Fiji* highlighted that children are more likely to be living in poverty compared to adults; while the national poverty rate is 30.6%, the poverty rate among children is 35.3% (2014).[9]

Food Security

Available information for the 2004 Nutrition Survey indicates a downward trend in the production of traditional food crops for local consumption and a subsequent increase in the consumption of cereals such as flour and flour products and rice. Food Balance Sheet data spanning the period 1992-2006 on major sources of calories from the available food supply showed cereals replacing root crops as a source of energy. The total calories available per capita per day from the food supply has increased from 2819 in 1985 to 3298 in 2006. However, the 2004 National Nutrition Survey 24 hour diet recall showed about 47% of the population consumed less than the minimum daily energy recommendation (1850 Kcal), indicating that some sections of the population do not have enough food to eat. Results of the 1993 and 2004 National Nutrition Surveys indicate a shift in preference from nutritious traditional vegetables and fruits to more introduced and imported varieties.[10]

The most challenging food security issues for Fiji are sustaining domestic food production levels in line with food demands and market potential, and continuing the transition from subsistence to semi-subsistence and commercial agriculture. Natural disasters such as drought, flooding and cyclones have impacted food security particularly in rural and maritime areas of Fiji.

Housing

Homelessness

A recent review undertaken by the ILO estimated that there are at least 2,000 young people who are homeless in Fiji. The majority of these homeless youth are reported to have escaped violent domestic situations or have been forced into homelessness by unemployment, urbanisation (migration from maritime and rural areas in search of work) or teenage pregnancy.

Both the Salvation Army and Home of Hope (Suva) offer short-term accommodation support for homeless youth and young unmarried mothers. No other services were reported to exist in centres outside of Suva.

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[8] https://dfat.gov.au/about-us/publications/Documents/fiji-appr-2012-13.pdf

[9] Child Sensitive Social Protection in Fiji. UNICEF 2015

[10] Fiji Plan of Action for Nutrition 2010-14. MoHMS

Community and home safety

Data relating to community safety was limited for adolescents.

Improving community and home safety was frequently cited by stakeholders as a priority area. The Police Community unit undertakes advocacy and information sessions in the community with young people to discuss safety, violence and crime. Fiji reports high levels of domestic and interpersonal violence and young people are often the victims. A high proportion (~30%) of adolescent deaths occur in the home and community, date on cause of death in the community was not sourced.[11]

Child protection

Child protection data on sexual assault was sourced from the Fiji Police. In the period 2011-15 there were a total of 14,052 sexual offences reported to police involving minors. These included 1,259 rapes of females and 212 rapes of male minors (all ages <18 years). The report indicates that 2015 recorded an alarming number of Child abuse cases. The 6 to 12 year olds age group have recorded an increase from 146 victims in 2014 to 166 victims in 2015; a 14% increase. The majority of sexual offences reports were in 13-17 year olds; between 550 (2011)- 750 (2013) reports annually. In addition a number of sexual offences were committed against disabled young people, the majority of these were against young females.[12] Data on other forms of child abuse were not available to be included. It should be noted that these figures are likely to be a substantial underestimate as all cases would not be reported and the increases may be due to increases in reporting rather than a true increase in sexual offences.

Orphans

There are a number of orphanages in Fiji that provide home to orphans and abandoned children. Young adolescents living in orphanages are reported by the Ministry of Education to have support to continue school and further studies. The Fiji adoption laws are currently waiting for review.

Justice

Incarcerated youth and crimes against adolescents

A recent study found that homicide rates were four times higher among iTaukei youths than Fijians of Indian descent.[13]

The Fiji prison population rate is 174 per 100,000. Limited data is available on incarceration of youth. Juveniles and minors represent 0.7% of the total Fiji prison population.[13] There is no separate youth justice system.

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[11] FHSSP and MoHMS Mortality review 2014

[12] Fiji Police Child Sexual assault data: 2011-2015

[13] World Prison brief. Fiji country profile 2015 http://www.prisonstudies.org/country/fiji

Crimes against adolescents are considered to be largely under-reported and in the majority relate to family and domestic violence, neglect, rape, sexual exploitation and trafficking (within Fiji). To date two individuals have been charged with trafficking of under-age girls for prostitution within Fiji. There are no victim supports services and the Police Youth Officers interviewed stated that child victims often are not able to return home or to their community and are often blamed for the crime perpetrated against them, particularly if an older family or community member has been charged and jailed.

Youth engagement

Engagement in youth and sporting groups

There are reported to be almost 3,000 youth groups in existence in Fiji. The Ministry of Youth and Sport have approximately 380 groups registered. The participation rate is unknown. The majority of youth groups are church or cause based. Through the Ministry of Youth and Sport (MoY&S) engagement with youth groups is undertaken to deliver SRH training (utilising a package that was developed by MoY&S, MoHMS and UNPFA). In addition, the MoY&S support programmes such as *Seeds for Change* and the *Duke of Edinburgh Awards Scheme,* which aims to increase youth engagement with community and develop life skills. There are numerous local and national sporting events that are targeted by officers from the MoY&S and the MoHMS to increase awareness of wellbeing, engagement in sport and provide information on the prevention of NCDS and STIs.

Youth Participation in policy, governance

A Pacific Youth Framework has been developed and completed in 2015, led by the Secretariat of the Pacific Community. Fijian Youth had considerable engagement in developing this Pacific Framework and a framework for Fiji supported the MoY&S. The Fiji Youth Declaration was published in 2015, the declaration has a section specifically addressing youth health (Appendix 8). The programs are offered by government through the MoY&S, faith-based groups, NGOs and training institutions. The MoY&S has identified two specific programs for youth that the coordinate; the National Youth Service Scheme and the Duke of Edinburgh Award[14] aimed at developing youth leadership. Faith-based organisations have traditionally been involved in leadership training as part of their membership grooming and development process. Training and educational institutions have only recently been involved in leadership training initiatives. Other leadership programs are offered by organisations such as the Young People's Department of the Methodist Church, the Youth Ministry of the Seventh Day Adventist Church (SDA) and the Fiji Muslim Youth Movement (FMYM) which is affiliated to the Fiji Muslim League (FML). Other faith-based organisations have loose structured programs for young people but which do not necessarily

[14] The Duke of Edinburgh's Award Program was first introduced in Fiji in the 1960's and has only recently become a strong component of the Department of Youth's activities. The program is for those aged 14 to 23.

focus on leadership training. Newer and targeted programs are being offered by NGOs like Leadership Fiji (LF), Emerging Leaders Forum (ELF) of the Fiji Women's Rights Movement (FWRM), Fiji Girl Guides Association through its Gold Program, ECREA's Youth Peace and Development Programme 21 (YPDP) and training institutions like the Centre for Appropriate Technology and Development (CATD) and the Marist Training Centre in Tutu, Taveuni. The Leadership Development Program based at the University of the South Pacific's School of Governance and Development Studies offers needs based leadership training. In addition to youth leadership training, the program also includes training for the public and private sector, women and traditional leadership. These newer programs in essence have been established specifically in response to the absence of leadership development training and leadership challenges.

3.3 HEALTH RISKS

Substance abuse

The Global Youth Tobacco Survey 2009 for adolescents aged 13 – 15 years found that 22.2% of students had ever smoked cigarettes (male 29.9%, female17.2%) in Fiji, 13.0% currently use any tobacco product (male17.5%, female 10.1%), 8.5% currently smoke cigarettes (male 12.8%, female 5.8%), 6.8% currently use other tobacco products (male 8.8%, female 5.6%) and 14.0% of people who had never smokers are likely to initiate smoking next year.[14]

Substance abuse was reported to be increasing (anecdotal reports suggested increase in glue sniffing, homemade alcohol consumption and kava usage at increasingly younger ages). Alcohol abuse in adolescents and young people is considered to be widespread. However alcohol is cost prohibitive to the majority. Preliminary reports from a recent survey undertaken by Fiji National University suggest that young people may sell kava and marijuana to buy alcohol in rural areas. The MoHMS WHO Mental Health Gap (MH Gap) trainers reported that during training sessions there are high levels of disclosure of alcohol and substance abuse from young health professionals. Further data was not able to be sourced for adolescent substance abuse levels.

Physical Inactivity

A study of Fijian 13 – 18 year olds in 18 peri-urban schools found high rates of physical activity during school hours, with low rates after school.[15] According to the 2004 National Nutrition Survey, the majority (72.7%) of the respondents aged 12–17 reported doing light work; during leisure time. However, 79.4% of males and 58.6% of females reported vigorous activity levels. No further details were available.

Team sports are played widely in Fiji: rugby, soccer, netball, volleyball. However stakeholders reported that the level of participation declines in mid-adolescence. Free school buses have recently been introduced, which one stakeholder from the MoY&S reported as having led to a decrease in the number of children walking to and from school. No data was found to substantiate this. In high school, sport is reported to have been cut from the curriculum in the later years of school to make time for more academic subjects. There are no Physical Education (PE) teaching courses at university level in Fiji.

Nutrition

A National Nutrition Survey was completed in 2014. However at the time of this review, the results were not available. The data available was limited to the 2004 National Nutrition Survey. The most recent data available from the MoHMS for nutrition in young people and adolescents is from the 2004 National Nutrition Survey. The 2004 survey found 31% of 15-14 year olds were anaemic. Data on malnutrition and obesity was only available for 18 years and older. These data showed 6% of adults were underweight, 32% were overweight and 24 % obese. A National Nutrition Strategy is under development, which is guided by the Fiji Nutrition Plan for Action (FPAN). A recently published study that examined nutrition in schools in Fiji found among 230 schools, 33 (14%) had no canteen data available. Of the 197 schools with data, only 31 (16%) were fully compliant with National School Canteen Guidelines. This was irrespective of school location or whether the canteen was school or commercially operated. In a random sample (n = 44 schools), overweight and obesity were more common among children in non-compliant schools than in fully compliant schools (40% vs. 32%, P < 0.001).[16]

Obesity

A study published in 2015 examining associated factors for obesity in adolescents in four Pacific countries, including Fiji, found the prevalence of overweight or obesity to be 24.3% and 6.1%, respectively, in the four countries in adolescents aged 13-16 years.[17] Being female was associated with being overweight; consumption of carbonated soft drinks with obesity; sedentary behaviour with overweight or obesity and suicidal ideation with overweight.

Iron deficiency

The 2004 National Nutrition Survey reported the prevalence of anaemia in 15-24 year olds to be high: 36.9% (males 29.2%, females 44.4%). Female adolescents higher a slightly higher prevalence than their male counterparts (male 25.4%, female 32.9%). Data from the 2014 National Nutrition Survey has not yet been released.

Sexual risk

No data was available on early sexual debut use in adolescents. According to the Millennium Development Goals Report 2004, young people in Fiji were said to be embarrassed to seek condoms in pharmacies because of the stigma of being associated with being promiscuous and irresponsible. From 2008 Second Generation Surveillance Surveys of HIV, other STIs and Risk Behaviours in Fiji, among the respondents aged 15–49, 93% had heard of a male condom and 49% of a female condom. Of these respondents, 198 (47.5%) had ever used a condom, 11 (2.6%) had used a condom at last sex and 91 (21.8%) at first sex.

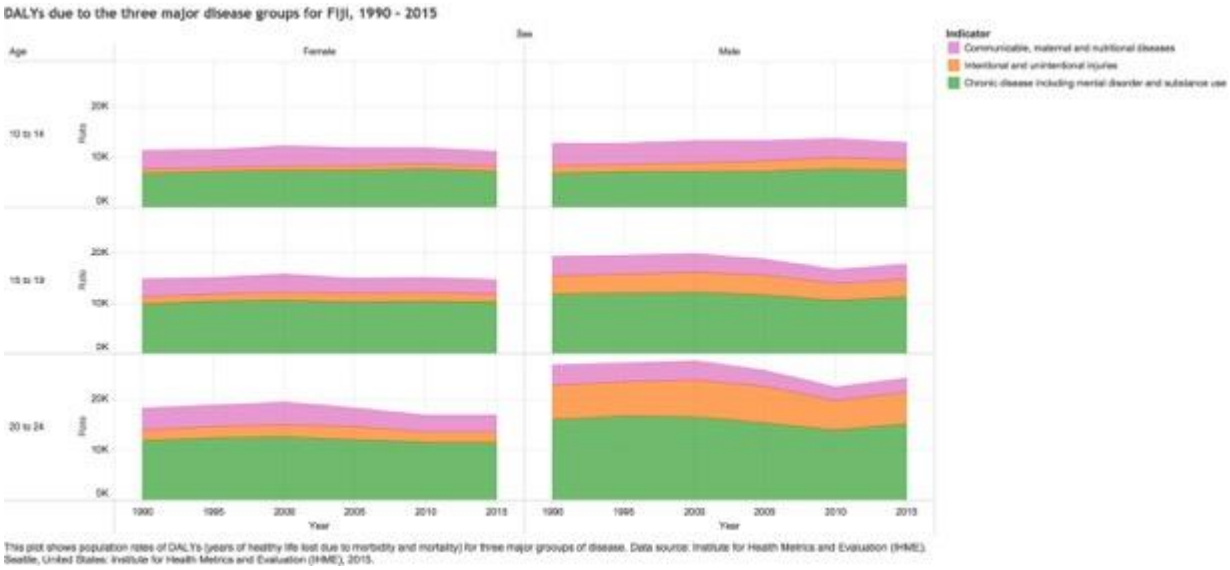
A 2010 survey of young women [18] found that women and girls often want to use condoms, but they find communication about this is difficult with intimate partners. Both women and men have expectations that “trust”, “love” and “faith” will prevent HIV and STI transmission. Most participants believed that their partners did not have other partners, whereas this was not the case. Amongst those who did not use condoms, 62% cited

"faithfulness" as the reason. It is clear that many people believe that "knowing your partner" is protection in itself. There was almost no specific knowledge of the nature of testing for HIV or STIs, and some believed that testing is itself a method of prevention. Knowledge of STIs, including causes, names and symptoms, was minimal. Frank discussion rarely took place between partners about sex, condoms, desire, or STI and HIV transmission. The researchers indicated that this suggests that most people "externalise risk", meaning that they consider risk of HIV and STIs occurs only for other people, particularly for sex workers. The report recommends that prevention programs and health services increase efforts to help people to understand that intimacy carries risks, even with people who are well known.

3.4 HEALTH OUTCOMES

Fijian adolescents have a large burden of poor health, there has been little improvement over time, and that there are large burdens of communicable/maternal/nutritional disease, injury and chronic illness. The sections below provide detail within these domains. The Global Burden of Disease study data for disability adjusted life years (DALYs) (Figure **3**) show that there has been little change in the disease burden for adolescents in Fiji over the past 25 years. DALYs calculate the years of active life lost due to death and disability.

Figure 3 Disability Adjusted Life Years (DALYs) for adolescents by three major disease groups: 1990-2015



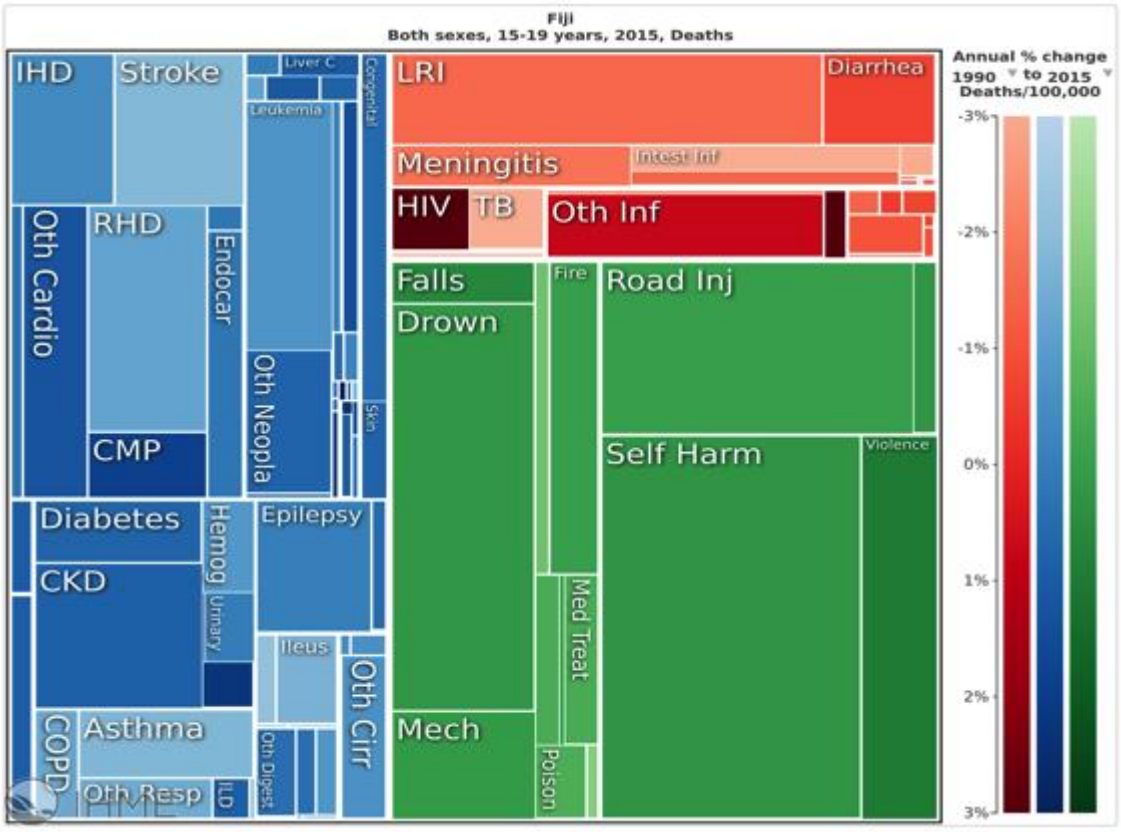
COMMUNICABLE, MATERNAL AND NUTRITIONAL DISEASES

Adolescent Mortality

Cause-specific mortality data for adolescents is limited. The HIU data extraction provided information on deaths occurring in hospital, which are likely to under-represent the full picture of adolescent mortality. The GBD study provides a pictorial indication of cause-specific mortality (Figure **4**). The leading causes of deaths in adolescents were injury related, particularly self-harm, road injury, drowning and violence. NCDs are also responsible for many deaths particularly from RHD, leukaemia, stroke and cancer. Communicable diseases

contribute to adolescent mortality in smaller, although still significant numbers from respiratory and diarrhoeal disease.

Figure 4 GBD cause-specific mortality estimates for 15-19 year olds in Fiji



Source: GBD results. IHME accessed Oct 2016

Additional Fiji data available from the 2014 mortality review shows the breakdown of adolescent deaths for 2012 by gender and place of death. Of the 128 deaths recorded in 2012, half occurred in a divisional hospital, with only a small number occurring in sub-divisional hospitals. However deaths in the home and community account for 27.5 % and 23.9% of all deaths in the 10-14 year and 15-19 year old age groups, respectively. There were more deaths in males compared with females. The highest age-specific death rates were seen in male Fijians of Indian descent aged 15-19 years old. [15] There was no cause-specific details available from this review.

Sexual Reproductive Health and Sexually Transmitted Disease

The data on prevalence of STIs in the Adolescent age group is limited.

HIV disproportionately affects young people in Fiji. The 20-29 and the age groups account

[15] MoHMS and FHSSP Mortality review. 2014

for 45% of all the infections reported, with 3 % of new cases reported in 10-19 year olds.[16] The majority of HIV infections have been among iTaukei (81%), whilst Fijians of Indian descent constitute 13% of reported cases. Case reports of HIV amongst sex workers and men who have sex with men are low indicates that the HIV burden is not expanding through the groups who are most usually considered to be key affected populations. Similar research was conducted amongst men who have sex with men in Fiji in 2011, and the results indicate that this group is not yet experiencing an epidemic. There are very few reports of injecting drug use amongst people in Fiji, so this is also unlikely to be a driver of an expanded epidemic.

Research undertaken by the AIDS Task Force of Fiji, supported by UNDP in 2011 found that respondents reported a diversity of sexual and gender identities and gender expressions: straight, bisexual, gay and transgender were terms that people used to describe themselves. Many men and transgender people who have sex with men reported severe experiences with stigma and discrimination, including being talked about by others, suffering verbal abuse and very high levels of physical abuse: 30.3% had been physically hurt in the last six months. Rates of HIV testing were very low, with only 10.5% having had an HIV test and been back to find the results in the last 12 months.

A study is underway in Fiji[17] documenting the effect of Human papillomavirus (HPV) vaccine on HPV detection rates and the prevalence of genital warts in young Fijian women. A sample of 820 pregnant (and therefore sexually active) young women aged <21 years old in Suva are being recruited. Preliminary results on the first 342 women recruited so far show the 16/18 HPV (high risk genotypes for cervical cancer) detection rate in unvaccinated women was 13%, which is similar to unvaccinated girls in the post vaccine period in Australia. The prevalence of genital warts in unvaccinated girls was 3%.

No adolescent data was available for other STIs that are common in Fiji: ie.syphilis, gonorrhoea The 2014 MoHMS annual report shows the overall incidence rate of syphilis as 65.6 per 100,000 and 60.6 per 100,000 in 2013 and 2014, respectively. Case detection amongst antenatal clinic attendees in 2008 found that pregnant women under 25 years had the highest rates of Chlamydia, with 37.5% being infected (Fiji HIV strategic plan 2012-16).

There are an estimated 200 adolescents who engage in transactional sex in Suva.[10] Anecdotal information from stakeholders interviewed and media reports suggest that 70% of adolescents engaged in sex work are living at home (and transactional sex is undertaken either with or without the knowledge of their parents). Some cases of adolescents supporting the family as the sore breadwinner were cited by health workers.

Teenage pregnancy

The two targets for adolescents in the National Strategic Plan 2011-15 are:

[16]Fiji National Strategic Plan on HIV and STI 2012-15.

[17] Fiji MoHMS and Murdoch Childrens Research Institute.

- Adolescent birth rate per 1000 girls aged 15 to 19 years
- Rate of teenage pregnancy reduced by 5% (per 1000 CBA population)

The adolescent birth rate has fluctuated over the last five years. The data available from the MoHMS annual reports from 2012-2014 shows the rate of pregnancy in adolescent girls aged 15-19 years fluctuating between 20-40.1 per 1000, with a reported rate of 40.1 births per 1000 in 2014. Baseline figures for these indicators were not located and the target of 5% reduction of teenage pregnancy does not appear to have been reached. In 2015, the adolescent birth rate was 36.2 per 1000 girls aged 15-19 years, representing 6% of total deliveries. In 2015, there were eight births recorded to girls under the age of 15 years, representing 0.1% of all births. Skilled birth attendance is close to 100%.

Hospitalisation data found the delivery IR for ITaukei compared to Fijians of Indian descent was higher (IR: 3877.71 per 100,000 population (95%CI: 3808.27, 3948.09) versus 2154.24 per 100,000 population (95%CI: 2084.19, 2226.03).

Late presentation, in the third trimester for ANC was reported to be common in adolescents. Two pregnant eight year olds have presented in the past 12 months and obstetric team and midwives report that they see pregnant 12-14 year olds in increasing numbers. Historically teenage pregnancy was seen more in iTaukei girls, however the obstetricians and midwives interviewed in Lautoka and Suva reported that teenage pregnancy is increasingly common in young girls of Fijian Indian Descent. This finding was not reported in Labasa. Data was not available on birth rates of married compared to unmarried adolescents.

Respiratory: pneumonia and asthma

Paediatricians report high levels of asthma with many cases presenting to the outpatient departments. Adherence to prevention medication is thought to be poor. Deaths from asthma are not uncommon in Fiji, particularly in young adults (limited data available). Table 3 shows admissions due to pneumonia and asthma, 2012-2015, Fiji. The pneumonia incidence rate (IR) for iTaukei compared with Fijians of Indian Descent was higher (IR: 41.61 per 100,000 population (95%CI: 36.70, 46.98) compared to 15.06 per 100,000 population (95%CI: 11.21, 19.80)). Females and males were similarly affected (IR: 34.77 per 100,000 population (95%CI: 29.89, 40.22) compared to 29.99 per 100,000 population (95%CI: 25.38, 35.19)). The asthma incidence rate for iTaukei compared with Fijians of Indian Descent for iTaukei compared with Fijians of Indian descent was lower (IR: 10.24 per 100,000 population (95%CI: 7.89, 13.08) vs. 34.55 per 100,000 population (95%CI: 28.57, 41.40). Females were affected more than males (IR: 23.99 per 100,000 population (95%CI: 19.89, 28.69) compared to 13.64 per 100,000 population (95%CI: 10.65, 17.20)). However, this is not a true reflection of all pneumonia or asthma cases in this age group as only severe cases would hospitalised, and there are a multitude of barriers to seeking health care.

Table 3 Hospitalisations due to pneumonia and asthma, 2012-2015, Fiji

	Number of cases	10-14 year old IR (95%CI)	15-19 year old IR (95%CI)	20-24 year old IR (95%CI)
Pneumonia	331	28.71 (23.36, 34.92) per 100,000	33.72 (27.79, 40.54) per 100,000	34.98 (28.96, 41.90) per 100,000
Asthma	190	28.14 (22.84, 34.29) per 100,000	14.32 (10.56, 18.99) per 100,000	13.04 (9.48, 17.51) per 100,000

IR incidence rate, CI confidence interval. Source HIU, 2012-2015

Vaccine Preventable Disease

Typhoid

Typhoid surveillance data suggest that typhoid has become increasingly common in rural areas of Fiji and is more frequent amongst young adults, than other age groups. Transmission of the organisms that cause typhoid is facilitated by faecal contamination of food or water and may be influenced by local behavioural practices. A research project with the MoHMS and Murdoch Childrens Research Institute (MCRI) and collaborating partners has been examining typhoid epidemiology in Fiji over recent years. Typhoid incidence in 10-24 year olds was found to be higher than any other age group.[19, 20] This research has examined transmission and prevention services, however there has been no specific adolescent focus.

The hospitalisation IR for 10-24 years olds for iTaukei compared with Fijians of Indian Descent was higher (IR: 14.56 per 100,000 population (95%CI: 11.72, 17.88) vs. 2.36 per 100,000 population (95%CI: 1.02, 4.65). Only cases that are blood culture positive are included and the sensitivity of this test is low, making this an under-representation of all cases.

Tuberculosis

Tuberculosis (TB) is an ongoing public health challenge in Fiji. Clinical case detection and management are critical for effective TB control. Most TB cases in Fiji are hospitalised for the intensive phase of treatment. A recent review of hospitalisations for TB (2010-14) in Fiji found a total of 395 TB hospitalised cases, of whom 61% were sputum smear-positive.[21] The largest proportions of cases were among young adults (15-34 years) and the unemployed, respectively 43% and 71%. Six percent of all cases were aged less than 14 years (further age breakdown not available). Diabetes (13%) and smoking (22%) were common comorbidities. Final anti-tuberculosis treatment outcomes were available for 96% of cases;

81% were cured or completed treatment. Default was more common in those with current employment. No cases of drug-resistant TB have been reported in adolescents in Fiji.[18]

Vector Borne Disease

An increase in vector borne disease has been reported in recent years, affecting both the population of Fiji. The MoHMS annual report 2014 shows an all age incidence of Dengue fever of 3.5 per 100,000 in 2013 and an all age incidence of 1150 per 100,000 in 2014. Data were not available by age group.

Paediatricians report and increase in Dengue fever admissions and an outbreak in 2014-15. Both Zika Fever and Chikungunya cases have been reported through the Pacific region in increasing numbers. Fiji did not routinely test for either of these diseases until 2016.

Leptospirosis

Leptospirosis is an important zoonotic disease in the Pacific Islands. Risk factors and drivers for human leptospirosis infection in Fiji are complex and multifactorial, with environmental factors, such as poverty, iTaukei nationality, living in villages with untreated water source, and living in close proximity to livestock playing crucial roles. In Fiji, two successive cyclones and severe flooding in 2012 resulted in outbreaks with 576 reported cases and 7% case-fatality.[22] A cross-sectional study found a high seroprevalence in adolescents and children. With higher prevalence in males than females (10-19 years: males 28% and 12% respectively). Rates have increased at a population level in recent years. (MoHMS Annual reports 2012-14). The MoHMS has reported a spike in Leptospirosis cases since Cyclone Winston occurred in February 2016 (data not available by age group). Age disaggregation of data is needed to quantify the impact on adolescents.

Scabies and skin disease

Scabies occurs at high levels across all age groups, ethnicities, and geographical locations in Fiji. A national community survey sampling > 10,000 people found scabies present in 18.7% (CI 95% 17.4-20.6) of adolescents aged 10-14 years and 13.2% (CI 95% 11.5-14.9) of young people aged 15-24 years. Impetigo was found in 16.8% of adolescents aged 10-14 years and 8.4% of young people aged 15-24 years.[23]

INTENTIONAL AND UNINTENTIONAL INJURIES

Gender based violence (GBV)

Violence against women and girls in Pacific countries is among the highest in the world. Up to 68% of Pacific women are reported to be affected.[19] According to a survey undertaken by the Fiji Womens' Crisis Centre more than 1 in 4 women (27%) have been physically abused

[18] National TB strategic plan 2015-20

[19] UNFPA report 2014

since the age of 15 by someone other than a husband or intimate partner. Almost 1 in 10 (9%) have been sexually abused since the age of 15 by a husband or intimate partner. The prevalence of non-partner physical and/or sexual violence since the age of 15 is 31% (almost 1 in 3 women). Overall, 7 in 10 women (71%) have been subjected to physical and/or sexual violence by either a partner or non-partner since they turned 15.[24] Considering the accompanying health, social, economic, development and intergenerational consequences, few problems have a more lasting and large-scale effect than violence against women and girls. Despite its severity and extent, services for survivors are limited and virtually non-existent in remote areas.

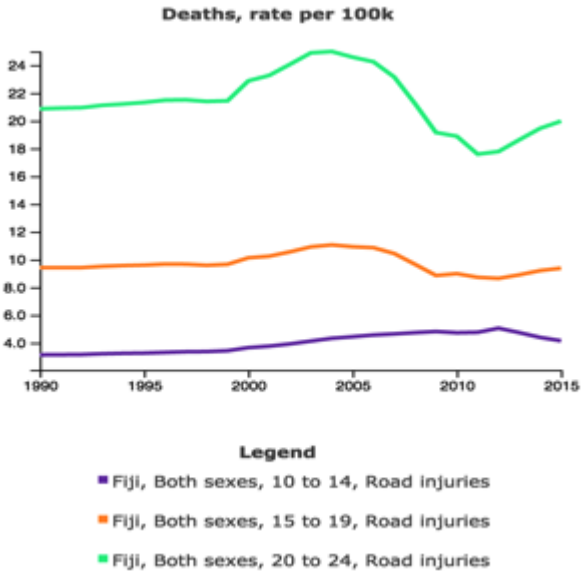
Annually approximately 200 adolescents aged <16 years are reported to be raped.[20] The Police Youth Divisional officer stated that these data are likely to be under-reported as many cases, particularly if incestuous are not likely to be reported. However reporting of sexual and gender based crimes is thought to be improving due to the widespread media reporting of GBV and advocacy campaigns in recent years.

Unintentional Injury and motorised vehicle injury

The GBD study data provides an estimate of deaths due to road traffic accidents. GBD estimates of deaths due to road injuries in Fiji in 2015 were 4.15 per 100,000 in 10-14 year olds, 9.38 per 100,000 in 15-19 years and 19.97 per 100,000 in 20-24 year olds.

Figure **5** presents the rate of road traffic injury by age group from 1990-2015.

Figure 5 Fiji Road traffic injury death estimates (per 100,000) 1990-2015 by age group



Source: GBD results. IHME accessed Oct 2016

Data available for 2012-13 from MoHMS and FHSSP mortality review highlight that a large

[20] Fiji Police Force Crime Statistics. 2015

proportion of deaths in in adolescents occur in the community or home and are due to injury. A research project published in 2016 found one in four injuries in the Fiji Injury Surveillance in Hospitals database occurred among youth (n = 515, incidence rate 400/100 000). Injury rates were higher among men, those aged 20-24 years compared with 15-19-year-olds, and iTaukei compared with Fijians of Indian descent. The leading causes among iTaukei were being hit by a person/object (men) and falls (women), whereas for Fijians of Indian descent, it was road traffic injuries (men) and intentional poisoning (women). Most injuries occurred at home (39%) or on the road (22%). Of the 63 fatal events, 57% were intentional injuries, and most deaths (73%) occurred prior to hospitalisation. [13]

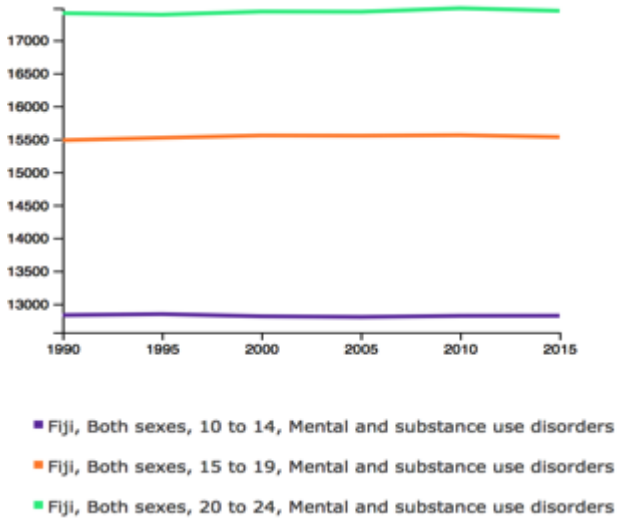
CHRONIC DISEASE INCLUDING MENTAL DISORDER AND SUBSTANCE ABUSE

Mental Health

There is very limited data and information available for the mental health of adolescents in Fiji. The best estimates available are from the GBD study. The GBS study estimates for prevalence of Mental and substance abuse disorders are presented in

Figure **6**. The prevalence rates are high across all age groups, 2015 estimates estimate a prevalence of 12,821 per 100,000 in 10-14 year olds, 15,533 per 100,000 in 15-19 year olds, increasing to 17,446 per 100,000 in 20-24 year olds. Estimates indicate that the prevalence has remained unchanged over the past 25 years.

Figure 6 Prevalence of Mental Health Disorders and substance abuse (per 100,000) 1990-2015, by age group



Source: GBD results. IHME accessed Oct 2016

The Fiji National Mental Health Plan and Policy was released in October 2015 providing indicators and targets many of which relate directly to adolescent health. A lack of baseline data on anxiety, depression and other mental health issues was highlighted as a challenge by many of the stakeholders interviewed. Data on self-harm in adolescents were not available. Discussion with the paediatrician group at CWMH and Empower Pacific counsellors

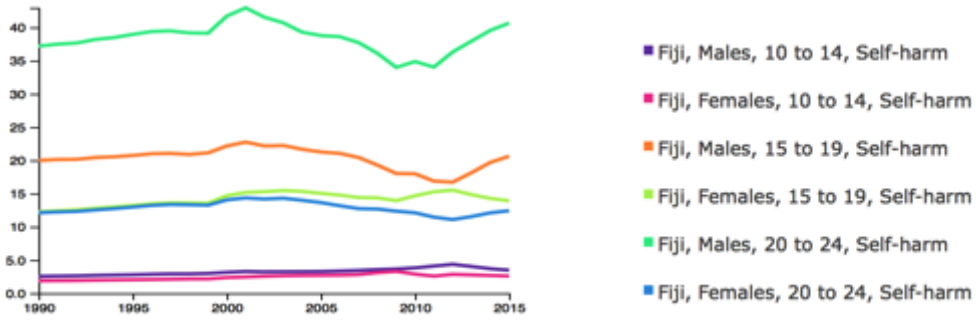
confirmed that injuries related to self-harm are under-reported and difficult to quantify in the adolescent population. People that survive a suicide attempt and are hospitalised are referred to Empower Pacific for counselling [46].

Suicide

GBD estimates for deaths related to self-harm show little change in the rate over the past 25 years, with the highest rates in young people aged 2024 years. Rate of death from self-harm are highest in males aged 20-24 years (.

Figure 7).

Figure 7 Deaths from self-harm (rate per 100,000), by sex and year, 1990-2015



Source GBD. IHME accessed Oct 2015

The number of reported teenage suicides in Fiji has varied over the years, with 47 and 66 reported teenage suicides in 2007 and 2008, and 13 teenage suicides in 2009. The MoMHS 2013 Annual Report found the number of teenage suicide as 13 and 14 for 2012 and 2013 respectively [44]. It is unknown whether this drop was due to a change in reporting mechanisms, definition or reporting accuracy. Due to cultural sensitivities and matters of legality, suicide rates tend to be under-reported, even though it is not illegal to commit suicide in Fiji [45]. Previous studies in Fiji on attempted suicide have shown that the burden of suicide is highest in young, male Fijians of Indian Descent [[13], although young women of Fijian Indian Descent are at high risk of self-inflicted burns as a result of “conflict situations”. It seems likely that many of the deaths occurring at home or in the community may be due to suicide as well as non-intentional injury. The two main methods of suicide were hanging and ingestion of poison. In 2015, three young children aged less than 13 years were reported to have committed suicide in the Suva area. The majority of suicide by poison attempts involving young people in Fiji involve the ingestion of Paraquat or other agricultural pesticides.[21] Current legislation in Fiji restricts the purchase of pesticides to registered wholesalers of agricultural pesticides, however there is no legislation or restriction on the sale of pesticides at the retail level i.e. they can be purchased by anyone at retail venues.

Acute Rheumatic Fever and Rheumatic Heart Disease

[21] FHSSP unpublished child and adolescent mortality report: 2014

There are currently 3134 cases (all ages) of Acute Rheumatic Fever (ARF) and Rheumatic Heart Disease (RHD) on the National register with 48% currently aged between 10 – 24 years.

A data linkages study undertaken nationally in 2012 found, 141 patients presenting for the first time with RHD, giving a crude national incidence rate of 16.4 per 100,000 person-years (95% CI 13.8-19.4). Echocardiographic data were available for 88 (62%). In the Central and Eastern Divisions, where ascertainment was more complete, 85 patients presented (echocardiographic data available for 76%) giving an crude incidence rate of 21.7 (95% CI 17.4-26.9). [25]

Hospitalisation data for 10-24 year olds with ARF and RHD found the IR for iTaukei compared to Fijians of Indian descent was higher (IR: 24.48 per 100,000 population (95%CI: 20.76, 28.68) vs. 7.09 per 100,000 population (95%CI: 4.54, 10.54). More females than males were affected (IR: 20.79 per 100,000 population (95%CI: 16.99, 25.20) compared to 16.33 per 100,000 population (95%CI: 13.04, 20.19)). However, these data do not accurately reflect the true burden as ARF it is known to be under-reported and under-recognised,[26]. New ARF and RHD cases are not always hospitalised. The RHD programme is working to improve the diagnositic capacity of clinicians and address health seeking behaviour that leads to late presentation with advanced RHD. There are approximately 35 ARF new cases reported to the register annually. The programme has struggled to improve adherence rates for secondary prophylaxis medication (the mainstay of RHD control), with an estimated 12% of patients nationally receiving protective levels of medications in 2014.

Since the 2006 more than 10,000 adolescents and children have had echocardiography screening for RHD, largely as part of epidemiological and operational research projects. The overall echocardiography confirmed prevalence of RHD is 19 per 1000 for children aged 5-14 years, with 8.4 per 1000 confirmed as Definite RHD on echocardiography. The echocardiography confirmed prevalence of RHD in 10-14 year olds was 22.9 per 1000 (CI 95% 13.9–35.6) with 7.2 per 1000 (CI 95% 2.7–15.7) confirmed as definite RHD. Girls aged 10-14 years had the highest confirmed RHD prevalence 24.2 per 1000 (CI 95% 14.9–37.1). The prevalence is likely to be higher in older adolescents. However, data is not currently available as school screening in secondary schools and at the community level has not been completed. Mortality from RHD in young people is highest in teenagers aged between 10-19 years (RR iTaukei female 3.5 per 100, i-Taukei male 2.0 per 100, Fijian of Indian descent female 2.5 per 100, male 1.3 per 100 unadjusted rate).[27, 28]

RHD is reported to be the second most common cause of maternal death in Fiji. Limited data are available for RHD related maternal deaths were reported in 2013, data from other years was not able to be sourced.[22] and many young women present in heart failure during pregnancy as undiagnosed cases, or as cases that have been diagnosed in childhood or

[22] Ministry of Health Fiji. Maternal Death Reports 2004-2013

teenage years and lost to treatment.[29] The annual cost of RHD in Fiji is estimated at FJ$22 million, with the highest proportion of cost due to lost productivity and premature death.

Diabetes

A 2006 research publication presents national data on the incidence and prevalence of diabetes in children aged <15 years in Fiji.[30] The project included diabetic cases from the three divisional hospitals. Forty-two children aged <15 years were diagnosed from 2001 to 2012. Twenty-eight were type 1 (66.7%), 13 type 2 (31.0%), and 1 (2.4%) had neonatal diabetes (INS gene mutation). For type 1, the mean ± standard deviation (SD) age of diagnosis was 10.2 ± 2.9 years, with similar proportions of males and females. Four (14.3%) were iTaukei ethnicity and 24 (86.7%) were Fijian of Indian descent ($p < 0.001$). The mean annual incidence of type 1 in children <15 years was 0.93 per 100,000 and in 2012, was 5.9 per 100,000. There was no evidence of a rise in incidence, but low numbers would preclude recognition of a small increased rate. For the 13 cases of type 2 diabetes, the mean +/-SD age of diagnosis was 12.2 ± 2.7 years, 85% were female ($p < 0.01$), and 85% were of Fijian of Indian descent. The mean annual incidence of type 2 was 0.43/100,000 and in 2012 was 2.4 per 100,000. No data on rates of type 1 and type 2 diabetes in adolescents over the age of 15 years was available during the review.

The hospitalisation data for diabetes type 1 showed the IR for iTaukei compared to Fijians of Indian descent was lower (IR: 5.44 per 100,000 population (95%CI: 3.77, 7.60) compared to 15.06 per 100,000 population (95%CI: 11.21, 19.80)). Males and females were equally affected (8.26 IR per 100,000 population (95%CI: 5.98, 11.13) compared to 8.80 IR per 100,000 population (95%CI: 6.39, 11.81). These data are unlikely to be representative of the burden of diabetes in adolescents as they only reflect hospitalisations.

Oral Health

Significant improvements in oral health in children under the age of 15 years have been made over the past decade. The Oral Health Indicators in the MoHMS Strategic Plan 2011-15 were to:

- Reduce dental caries in 12 year olds by 3 %: preliminary data indicate that this target has been reached;
- Increase oral hygiene practices in schools: target has been reached; and
- Introduce water fluoridation in three main urban areas: commenced in 2011.

The Fiji School Dental Programme is coordinated by the Wellness Unit. An outreach team visits every primary school aged child in Fiji, coordinated with school health nurse teams, annually to undertake advocacy, health promotion, dental review and intervention in schools. These activities include examination, the application of fluoride gel, scaling, polishing, filling and oral health education activities. Fluroridisation of the Fiji mains water supply commence in 2011.

The most recent oral health survey was undertaken in 2011, however full results were not available at the time of this review. The WHO Decayed, Missing, Filled Teeth (DMFT) Index gold standard measurement is an average of 3 dental caries or filled teeth by age 12. A

MoHMS survey in 2004 found this to be 1.4 DMFT in 12 year old children in Fiji, more recent preliminary data (currently being analysed by FNU) suggests that this level has decreased to 1.1 DMFT per 12 year old.

The Fiji oral health campaign has expanded in 2014 to include high school children as previous data has suggested that oral health declines beyond 15 years of age: "Your Smile Matters" campaign".[23] School dental health review and intervention is free for all children aged < 15 years. However, from 15 years there is a FJ$5 charge for review and each intervention. This requirement is governed by the Fiji Hospital and Dispensaries Act (1960) that set standards charging for clinical services.

Disability

No disability data was available for inclusion.

All cause hospitalised conditions

There were on average 9,056 admissions per annum in the 10-24 year old age group. The all-cause admissions IR for iTaukei compared with Fijians of Indian descent was higher (IR: 3881.28 per 100,000 population (95%CI: 3832.59, 3930.44) versus 2913.70 per 100,000 population (95%CI: 2856.49, 2971.76). Females were nearly three times more likely to be admitted than males (5440.25 IR per 100,000 population (95%CI: 5375.80, 5505.29) vs 1731.42 IR per 100,000 population (95%CI: 1695.86, 1767.54)).

3.5 KEY DATA GAPS

Data was limited in a number of key areas, particularly nutrition, injury and mental health data. Hospitalisation data were included where appropriate, and were useful for assisting to describe the burden for acute diseases eg asthma and pneumonia. Where data was considered to be incomplete or missing Global Burden of Disease data has been included to describe estimates. Eg mental health, intentional and non-intentional injury DALYs. A summary of key data gaps is included in Box 1.

Box 1 Key data gaps by adolescent health domain

Domain	Gaps
Teen pregnancy	Limited data.
SRH	Available age segregated data was limited.
STI	Limited adolescent specific data available

[23] Personal communication Dr Joan Lal, Wellness Unit, MoHMS. October 2015

Nutrition	No recent data available, data from 2004 nutrition survey, very limited for adolescents
Infectious diseases and vector borne diseases	Limited data on TB, leptospirosis, dengue fever available by age group
Injury	Limited data available for adolescents. Data did not separate intentional from non-intentional injuries

4.0 CURRENT ACTIONS FOR ADOLESCENT HEALTH

4.1 PURPOSE OF THIS SECTION

This section outlines the current actions and strategies that include adolescent health in Fiji to identify the gaps and challenges, to assist the development of a strategic framework for adolescent health.

4.2 METHOD

Current actions for adolescent health were mapped these against the same reporting framework defined in Section 2. Stakeholder consultation was undertaken in the central, Western and Northern Divisions over a two week period in August 2016. Key individuals from the MoHMS, Ministry of Youth and Sport, Ministry of Trade, Ministry of Education and Ministry of Police were interviewed by one of the consultant team members. In addition stakeholders from non-government agencies were interviewed. The stakeholder meeting/interview schedule was developed in liaison with FHSSP senior staff and the National Advisor Family Health.

3.4.1 SYNTHESIS OF KEY FINDINGS

A detailed mapping of current programmes and services was undertaken. **Appendix 7 provides detail from this exercise.** While many programmes relating to adolescent health were identified, there are a number of reasons why these programs may not be resulting in improved health outcomes for adolescents.

There were five key findings from the scoping exercise:

1. Alignment of programmes with adolescent needs

It appeared that many programmes are not aligned with health needs of Fijian adolescents. Programmes for some health needs were absent.

Communicable disease, maternal and nutrition

Existing programmes and services did not always meet the needs of particular risk groups, for example, programmes relating to SRH largely appear to cater for older and married adolescents. Eg. Adolescents aged less than 18 years are required to provide parental consent for prescription based contraceptives and stigma is significant for young unmarried adolescent to access SRH clinics. Although there is an intention to deliver adolescent friendly health services in Fiji, these appear to have declined in number and services over recent years and are now limited to drop in centres in the three main cities with a focus entirely on clinical testing (STI, HIV) and contraception.

Intentional and non-intentional injuries

Injury, including drowning, motorised vehicle accidents and violence in adolescents is common however there are no programmes to address injury prevention. High levels of child abuse, domestic and gender based violence are reported. Programmes that exist to address injury prevention were ad hoc and limited. Eg. Community policing unit delivers some sessions in the community. There is no focus on injury prevention and life skills in the MoE school based Family Life programme.

Chronic Disease, including mental health and substance abuse

Available data and information indicate that mental health, including suicide, self-harm and substance abuse exact a high burden on Fijian adolescents however programmes addressing mental health awareness, including anxiety, depression and stress, were limited at all levels and prevention programmes were largely non-existent. The lack of data on self-harm and attempted suicide limits the ability of the MoHMS, MOE and partner organisations to deliver preventative programmes to address what appears to be a substantial issues for Fiji adolescents.

The RHD control programme has been significantly expanded over the past two years, however despite adolescents making up the largest proportion of registrations the programme has not yet developed any targeted actions for adolescents, and the lack transitional services sees a decline in secondary prophylaxis adherence and medical review, resulting in poor outcomes, maternal complications and high mortality rates in young adulthood.

Although a nutrition programme targeting health eating and food choices exists in Fiji, no evidence of adolescent specific data to provide targeted actions to address adolescent health outcomes. Eg data on iron deficiency anaemia is limited but indicates that anaemia rates are high however there is not a programme to deliver iron to secondary students. It is unclear whether parasitic infections are contributing to this and whether this should be combined with deworming programmes. Prevention and treatment of anaemia in pregnancy is particularly important. Obesity and overweight in adolescence appears to be an emerging issue, however it is difficult to quantify the burden and risks without good data to understand the nutritional needs and provide targeted nutrition programmes for this age group.

A summary of existing programmes and services related to MoHMS key priority areas for the Adolescent Health review are listed in Table 4**Error! Reference source not found.**.

Table 4 Examples of key programmes and services relating to MoHMS priority areas for Adolescents

	Existing programme	**Services**	**Comments**
SRH & STI	Reproductive Health	Drop in centres in	Services mainly consist of clinic consultation and contraceptive advice. Peer educators,

	programme	Labasa, Suva (3),Lautoka (2)	nurses and a doctor (some centres). Programme has contracted over past 10 years. Peer educator positions unfilled and no coordinated leadership, reporting or training. Medical Services Pacific (Suva) and school curriculum provide some educational resources.
Teenage pregnancy	Within SRH programme	Limited	Some information and resources available through drop in centres. One residential support service (church based) in Suva for pregnant teens.
Mental health	Mental Health strategic plan 2015 includes key indicators for adolescents	Limited	MHGAP training widespread > 600 health professionals trained in past 2 years. No Mental Health First Aid training. MoY and MoHMS services don't appear to be coordinated or systematic. School counselors largely untrained. Empower Pacific (EP) have MoU with MoHMS to provide MH counselling nationally. EP counselors complete comprehensive 1 year course with 2 years of mentoring. USP to commence course in 2017 – with EP and Australian partners.
Nutrition	National Plan of Action for Nutrition	No adolescent focus	Very limited information and data available specific to adolescents. School health team, which include dietitians visit all primary schools in Fiji annually to undertake health checks.
Rheumatic Heart Disease	RHD programme	Limited	48% of cases on RHD register aged 10-24 years. Adherence to secondary prophylaxis very poor for adolescents. Pilot projects underway. Transition to adults services has been flagged as difficult.

2. Scope and coordination

Programmes tended to focus on discrete issues and were poorly integrated and coordinated with other programmes, likely to introduce barriers for access. For example the MoHMS has

a cadre of peer educators located in each sub-division of Fiji. The training, role, scope, supervision and utilisation of this group appear to be poorly understood. The adolescent health officer role (charged with supervising and evaluating the delivery of the peer education programme and performance of the peer educators), has been vacant for the past 18 months. No standardised training package for peer educators is currently delivered, supervision is minimal with peer educators reporting to the Sub-divisional nursing sister, they are not able to enter secondary schools and work largely with the school health nurses to visit primary schools. A lack of coordination with the MoE means that peer educators are unable to deliver sessions in schools or work alongside school teachers given counselling responsibility. MoE counsellors are largely untrained and selected from the teaching cohort to provide support for students. Their training is ad hoc and they are unsupported by external services. Each divisional nursing sister interviewed reported that there were unfilled peer educator positions in their division, and no scope or resources were available for selecting, training and supporting the peer educators. Peer educators exist under many organisations and NGOs in Fiji. However these groups appear to work independently without any interaction or coordination of activities, scope or coverage.

Data on coverage of the majority of services and programmes was not available.

3. Funding availability and stability

Many programmes were funded for only short time periods. This sporadic nature of funding is likely to translate to sporadic programme delivery. eg the MoHMS Peer education and NIMS programmes. Partial or total reliance on donor funds to assist programme delivery without key priority areas identified risks appropriate delivery and sustainability of adolescent programmes. This appears to have been a contributing factor to the erosion of the peer education programme and to challenges in the ability of programmes to scale up interventions nationally.

4. Data and monitoring and evaluation

Programmes and approaches to adolescent health in Fiji remain poorly evaluated, their reach and effectiveness largely unknown which introduces barriers to taking these programmes to scale. Quality data to understand adolescent health needs is not available for the majority of MoHMS identified priority areas. The GBS study has limitations as it is produced from modelled data and does not always provides an accurate reflection of the true burden of disease, and is insufficient for programme monitoring. Hospitalisation data does not identify the full burden of adolescent health needs, as adolescent health is complex and largely exists in the community, school and home environment. Monitoring of current programmes and services and evaluation of uptake, effectiveness and quality is essential to ensure delivery of relevant, high quality service delivery. This limitation crosses all sectors, including health, education and employment which in turn limits the understanding and ability of programmes to identify vulnerable groups and inequity in service and programme delivery.

5. Legislative restrictions

Finally, current approaches to adolescent health in Fiji largely exist in a legislative context that is restrictive to addressing many key needs of adolescents. A salient example of this is the legislation relating to provision of medical forms of contraception to adolescents aged less than 18 years without obtaining parental consent. Contraceptive uptake has improved in recent years, however it remains at approximately 38%. The SRH programmes specifically target teenage pregnancy and STI prevention. However the rates of both teenage pregnancy and STIs remain high and appear to be increasing which may in part be due to the legislative restrictions that are in place.

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APPENDICES

APPENDIX 1: TERMS OF REFERENCE FOR SITUATIONAL ANALYSIS AND STRATEGY

- Develop a work plan for FHSSP outlining the approach to the assignment
- Conduct a situational analysis by reviewing all relevant and current documents pertaining to adolescent health programs, policies and strategies in Fiji.
- Consult with identified stakeholders to review the existing child health policy, adolescent health programs, and other relevant documents/programs and discuss recent initiatives or updates to adolescent health data/information and the impact these may have on the future of adolescent health in Fiji.
- Based on recommendations, discussions and consultations:
    - Identify and document alternative ways of delivering adolescent health services.
    - Develop an Adolescent Health Strategic plan.
    - Develop an implementation plan with indicators using the MoHMS template.
    - Present the draft strategy to key stakeholders for input and final review.

APPENDIX 2: LIST OF MEETINGS AND INDIVIDUALS INTERVIEWED

Ministry of Health and Medical Services

Deputy Secretary for Public Health, Dr Eric Rafai

Deputy Secretary Hospital Services, Dr Luisa Cikamatana

Family Health National Advisor, Dr Torika Tomani

National Advisor Nutrition and Dietetics, Ms Maca R

National Advisor Oral Health, Dr Joan Lal

RHD programme team: Ms Liz Kennedy (RHD programme lead), Ms Emele Nacieru (RHD Project Officer), Mr Maciu Silau, Ms Maureen Ah Kee, Ms Frances Matanatabu, Ms Laisiana Matatolu, Ms Matalita Kadin (Divisional Coordinator Northern Division)

National Project Officer Child Health Ms Sereana Tuwere

National Project Officer Reproductive Health: Mr Abdul Hussain

CWMH Obstetrician, Dr Romanu and Senior Midwives

DNS Eastern, Sister Talica Vakaloloma

DNS Central Sister Penina Druavesi

DNS Western, Sister Lesley Boyd

Acting DNS Northern Sister Mere and Sister Pulutu

DMO Central, Dr Dave Whippy

DMO Eastern, Dr Josiah Samuela

DMO Western, Dr Susana Nakaulevu

Paediatricians CWMH and Lautoka: Dr Lisi Tikodudua, Dr Ilsapeci Vereti, Dr Rigamoto Taito, Dr Laila Sauduadua, Dr Ranu Anjeli

Paediatric Outpatients CWMH, Sister Pradeep Kaur

Labasa Hospital, Senior Midwives

SRH HUB Suva, Dr Kinismere

Peer educators, Suva, Nausori, Vale Levu and Labasa

Ministry of Youth and Sport

Permanent Secretary, Ms Alison Burchell and Project team

Ministry of Industry, Trade and Tourism

Mr Marika Naiyaga

Ministry of Education, Arts and Heritage

Curricullum Division Officer Mr Mohammad Khalid

Ministry of Women, Children and Poverty Alleviation

Fiji Police Force

Mr Orisi Tukana, Inspector of Police. Officer in charge Juvenile Bureau

Ms Salaseini Vakatuturaganui Youth Officer Northern Division

Fiji National University

Dr Myrielle Allen, Child Psychiatrist

Dr Joseph Kado, Paediatrician and Chair RHD Technical Advisory Group

United Nations Agencies

UN Women, Ms Luisa Vodonaiva

UNFPA Dr Marija Vasilva-Blazev and team

UNICEF, Dr Frances Vulivuli

World Health Organization Youth Health Officer, Dr Yutaro Setoya

International Labour Organization Ms Surkafa Katafono, Ms Marie Fatiaki

Other Non-Government Organisations

Secretariat of the Pacific Community (SPC), Ms Mereia Carling

Save the Children Fund team

Empower Pacific, Lautoka Office: Mr Patrick Morgam, Mr Salesh Kumar, Ms Paulini Vakacegu, Mr Filipe Nagera

Youth Champs for Mental Health

Reproductive and Family health Association of Fiji: peer educators

APPENDIX 3: LIST OF KEY DOCUMENTS REVIEWED

1. Child Welfare Decree + Amendment, 2010

2. MoHMS National Strategic Plan 2016–2020
3. MoHMS Annual Corporate Plan, 2015
4. Child Health Policy and Strategy 2012–2015
5. Child Health Review Reports 2010 and 2016
6. MDG 4, 5 & 6 National Health Executive Committee Briefing Paper 2014
7. Fiji National Immunisation Policy and Procedure Manual 2013–2016
8. Fiji National Immunisation Coverage Survey 2013
9. Child Protection Guidelines for Health Workers in Fiji 2012
10. Fiji HIV strategic plan 2012-16
11. Fiji Policy on Prevention of Parent to Child Transmission (PPTCT) of HIV
12. Reproductive Health Policy 2011
13. Food and Nutrition Policy 2008
14. Fiji – Maternal Health Services Review and Strategic Action Plan 2013
15. Child Mortality in Fiji: A descriptive study of deaths in infants, children in Fiji based on death certificates. *FHSSP and MOHMS*
16. Fiji Journal of Public Health articles relating to child health
17. New Vaccine Evaluation Project Reports
18. Rheumatic Heart Disease Situational Analysis 2014
19. Clinical Practice Guidelines: Obstetrics and Gynaecology 2015
20. National Mental Health and Suicide Prevention Policy. 2015
21. Somebody's Life, Everybody's Business! National research on Women's health and Life Experiences in Fiji (2010/11) A survey exploring the prevalence, incidence and attitudes to intimate partner violence in Fiji. Fiji Women's Crisis Centre.2013.
22. Child –Sensitive Social Protection in Fiji: Assessment of the care and protection allowance. UNICEF. 2015
23. Ministry of Health and Medical Services Annual reports: 2010-14
24. Health of Adolescents in Fiji. WHO. Western Pacific Regional Office. 2011
25. Midterm review of the Access to Quality Education Program. Nov 2012. AUSAID
26. MoHMS Diabetes Management Guidelines 2012
27. RHD Policy 2015
28. Fiji Rheumatic Heart Disease Programme annual reports 2014 and 2015 and Rheumatic Fever Information System 2016.
29. Ministry of Education Annual report 2014
30. AusAID Access to Quality Education Program (AQEP), Fiji: Framework for Delivery. 2010 and AQEP mid-term report
31. NIMS- progress and mid-term evaluation report and data (Vitamin A, Zinc, deworming, micronutrients)
32. School Health Policy 2015 (draft)
33. An exploration of youth leadership models in Fiji. Pacific Leadership program. AUSAID
34. Fiji Plan of Action for Nutrition 2010-14
35. Fiji National Nutrition Survey 2004.National Food and Nutrition Centre Fiji. Published 2007
36. UNFPA Strategy on Adolescents and Youth. 2014
37. The Lancet. Adolescent Health Series. 2016
38. Global Burden of Disease Study 1990-2015. International Health Metrics and Evaluation Unit, University of Washington. USA
39. Fiji: A situational analysis of children youth and women. Government of Fiji with the assistance of UNICEF. 2007
40. Ministry of Youth and Sports Annual Corporate Plan 2017
41. Ministry of Youth and Sports Annual Report 2015
42. Media Spotlight on Child Labour (Fiji). International Labour Organization (ILO). 2013
43. MoHMS National Mental Health and Suicide Prevention Policy 2015
44. UNICEF State of Pacific Youth 2011: Opportunities and Obstacles
45. UNFPA. End of Project Evaluation of the Adolescent Health and Development (AHD) Project 2008-12
46. Ministry of Education, Arts and Heritage Annual Corporate Plan 2016

47. ILO Sexploitation and Trafficking of Children “in a nutshell”. A resource for Pacific Countries. 2015
48. UNICEF Child Abuse and Sexual Exploitation of Children in the Pacific: A regional report .2006.
49. Drug and Alcohol use in Fiji. Pacific Health Dialogue March 2011.
50. Fiji Ministry of Youth and Sport. Situational Analysis. 2011
51. Health in Prisoner Report. Burnet Institute and Empower Fiji. 2013
52. UNICEF. Children Living Away From Parents in the Pacific. 2013
53. Ministry of Youth and Sport. Youth Development Index Report. 2014.
54. Fiji National Strategic Plan on HIV and STIs 2012-15.
55. Fiji National Youth Policy. Ministry of Youth and Sport
56. MOHMS An assessment of Peer Educator’s contribution to Adolescent Sexual and Reproductive Health in Fiji. SPC and UNFPA. 2007
57. UNFPA. Y Peer Training Toolkit. http://www.unfpa.org/resources/peer-education-toolkit
58. UNICEF. Children in Fiji 2011. An Atlas of Social Indicators.
59. UN Women. Ending Violence Against Women and Girls in the Pacific. 2014
60. WHO. The Global Strategy for Women’s, Children’s and Adolescent’s Health (2016-2030) http://www.who.int/entity/life-course/partners/global-strategy/global-strategy-2016-2030/en/index.html
61. UNFPA and Fiji MoHMS. Family Planning and Reproductive Health Commodities Needs Assessment.
62. Child Sensitive Social Protection in Fiji: Assessment of the Care and Protection Allowance report. UNICEF. 2015.
63. Young People and Democratic Participation in Fiji. Citizens’ Constitutional Forum. May 2014
64. Report on the pacific Conference: Ending Violence against Children. UNICEF.Nadi. May 2015.
65. Fiji Youth Declaration. 2015
66. Pacific Young Women’s Leadership Alliance. Outcome statement. 2015

APPENDIX 4: METHODS AND KEY CONSIDERATIONS FOR ADOLESCENT HEALTH FRAMEWORK

Identifying and accessing health data to describe key needs

A literature search was completed using Mesh search terms for publications related to adolescent health in Fiji (2000-2016). In addition, reports were obtained from other government ministries, the Fiji government website, NGOs and other stakeholders, including WHO, UNICEF, UNFPA, Save the Children, UN Women, ILO, FHSSP and Australian DFAT.

Hospital admissions data was extracted by the Fiji Health Information Unit (HIU) by ICD 10 codes based on all hospitalisations at all divisional and sub-divisional hospitals in Fiji (2012-2015). National hospital admission data were extracted according ICD 10-AM codes from the computerised hospital admission database and categorised into common causes for admission, infection, non-communicable disease (NCD), mental health, injuries and childbirth related. Readmissions were included. Incidence rates were calculated using population data sourced from the Fiji national census data and adjusted for annual growth rates. Mortality data was extracted by the HIU.

Limitations of hospitalisation data in reporting adolescent morbidity

Population based data were largely unavailable for adolescent health issues. Data available from hospitalisation are likely to greatly under-estimate the morbidity for adolescents, particularly in areas such as mental health, nutrition, iron deficiency anaemia that in the majority do not result in hospital admission. Hospitalisation data that was made available by HIU has been used within the review, however it should be interpreted with consideration. Where limited data were available the reviewers have included Global Disease Burden estimates for Fiji.

Permission for data extraction was granted by the Research Unit in September 2016 (for the 2015-16 Child Health Review). Adolescent data from this extraction was utilised in this review focusing on 10-14 and 15- 19 and 20-24 year age groups.

This table defined a reporting framework for Fiji- ie it defines what is important for adolescent health. The table provides a rationale for inclusion of each domain. Key:

Domains of adolescent health		Stakeholder		BoD	Policy	Comments
	Environmental; including water, sanitation and climate change		Yes			Many stakeholders and reports flag environmental risks and challenges that impact health and well-being of adolescents
Social & structural determinants	Education		Yes	Yes	Yes	Education policy and data are available and high quality re: attendance, enrolment. Universal free education for all children to year 12 level was introduced in 2014. TVET training opportunities have increased over recent years. University scholarship (following year 13 education) available to all students to apply equally.
	Employment		Yes		Yes	Some data available from ILO and Ministry of Trade. Limited opportunities especially for rural youth. Child labour data available through ILO.
	Poverty		Yes		Yes	Ministry of Women, Children and Poverty Alleviation: housing scheme. Poverty and inequity highlighted as a problem by stakeholders in relation to housing, transport, food security, hygiene and

						sanitation.
	Food security		Yes		Yes	Food vouchers for pregnant women. Support for some vulnerable schools- lunch programmes. Rural population affected by climate and disasters. Urban poor at increased risk of malnutrition.
	Housing		Yes		Yes	Housing improvement scheme in place. Many live in poor quality, overcrowded housing. Water and sanitation in some rural communities and squatter settlements limited and sub-standard.
	Community and home safety, including child protection		Yes			Widely reported as an important and key issue- high rates of gender based and domestic violence. High injury rates in young people. Majority of adolescent deaths occur in home and community. Considerable work has been undertaken in the area of CP in recent years. An intersectoral CP agreement was signed by government ministries, NGOs and UN agencies in 2015.
	Social infrastructure including access to transport		Yes			Transport is expensive (boat, carrier truck and bus)- reported to limit access to health services by many interviewed. Free buses for children to attend school within residential zone introduced in 2014.
	Justice		Yes		Yes	Community Policing focus on young people- work in community with schools etc to engage and support.

						Juvenile Police Unit- high level officers completed CP qualifications in NZ. CP training to junior police underway. SOPs for CP and talking to youth in place. ILO reports indicate police violence to homeless youth and child prostitutes. One juvenile youth centre in Suva (boys only). Illegal to jail < 18 year olds. Police Juvenile Unit have put in a request to have officers trained in interviewing children (NZ).
	Youth participation		Yes			Some evidence of youth engagement and participation though Ministry of Youth activities.
Health Risks	Substance use: cannabis, glue sniffing, home made alcohol, kava, tobacco, alcohol		Yes	Yes		Alcohol and tobacco use were reported to be high- some data from ILO and FNU. Cost prohibitive although some stakeholders reported that young people (esp rural) sell kava to buy alcohol.Glue sniffing and cannabis use was reported to be widespread. Kava intake increasing in younger adolescents. (no data). Home made alcohol in rural areas. FNU child psychiatrist has just completed study of 800 youth re: substance abuse - data available late 2016.
	Physical inactivity					Ministry of Youth and Sport- limited information. School sports not offered in senior years of high school as part of curriculum. Sporting engagement declines post primary school. No PE teachers. One

						stakeholder felt that free bus system was reducing walking and unhealthy.
	Nutrition: Obesity, overweight and malnutrition		Yes	Yes		Obesity rates in adolescents reported to be high and increasing especially in i-Taukei population. Data not available(?)
	Iron deficiency		Yes	Yes	Yes	Prelim data from Nutritional survey 2014- suggest that anaemia rates are very high. No data by age group. Deworming programme ad hoc and focuses on pregnant women and young children.
	Sexual risk: early sexual debut, condom use					Many reported that sexual debut is occurring at young age. No data available. Free condoms available at drop in centres and locations in main cities.
	Adolescent mortality		Yes	Yes		Data available through HIS and GBD study may not represent the full-burden – additional data linkage required. MoHMS and FHSSP mortality review provides some cause specific data, including place of death for 2012.
Health outcomes (including mortality)	SRH and STI		Yes	Yes	Yes	Has been the main focus of AH in Fiji. HUBs, peer educator programme through MoHMS, SRH officer, other NGOs support advocacy and services eg MSP in Suva, UN Women, UNFPA. MoY are currently reviewing ARH manual with UNFPA. STIs are common. HIV rates reported to be

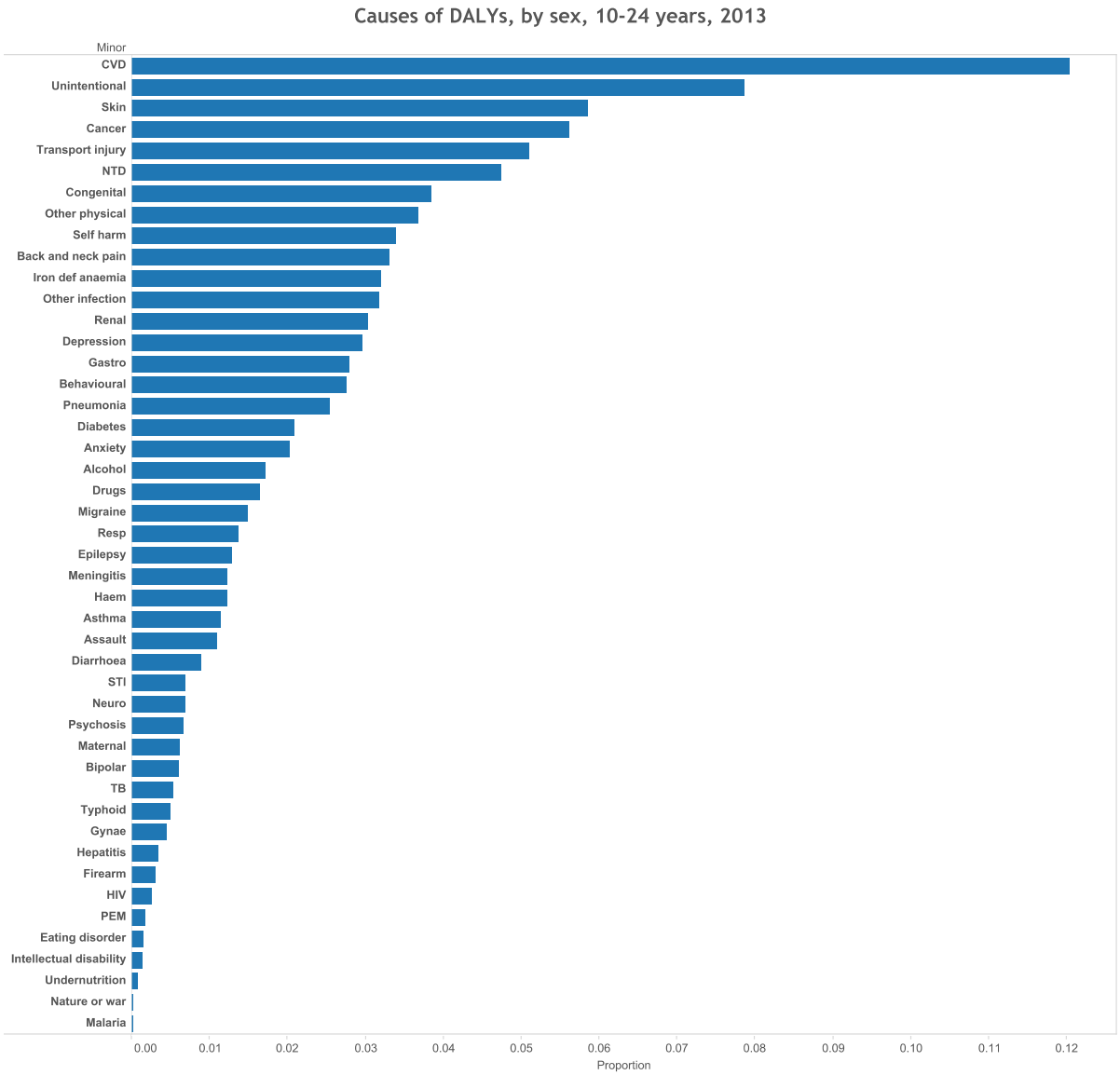
						increasing, most new cases in young people. Limited data available by age group.
	Teenage Pregnancy		Yes			Teenage pregnancy reported to be increasing. Data limited. SRH programme have focused on contraception- population contraceptive rates low but increasing(no data available for adolescents) Age of consent (18) limits access to contraception. Stigmatisation of unmarried pregnancy is reported to be high. One residential centre in Suva caters for young pregnant women.
	Mental health: self-harm, stress, anxiety, depression, psychosis		Yes	Yes	Yes	Anxiety, stress and depression were considered under-recognised by stakeholders interviewed. Need for services and training, advocacy and information prioritized by many. Some services and training- Empower Pacific, MoHMS- requires coordination, expansion and standardisation. MHSSP developed in 2015- with adolescent indicators. Child Health strategy in 2016- additional recommendations. Not yet implemented. Mental Health HR a huge issue nationally. No inpatient services.
	Suicide		Yes	Yes	Yes	High suicide rates particularly in young Indo- Fijian

						males. National Suicide prevention day a focus in schools. No mental health first aid training/ information delivered in schools Limited counselling services and no inpatient facilities for adolescents with attempted suicide.
	Assault/ domestic violence		Yes	Yes	Yes	Widely reported by stakeholders. Data from Womens Crisis Centre reports and UN Women. Young victims face difficult situation and may be blamed and excluded from family or community if perpetrator charged and sentenced.
	Gender based violence		Yes	Yes	Yes	Reported to be priority issue. Data available through Fiji Women's Crisis Centre, Ministry of Social Welfare. UN Women. Under reporting and lack of service in eastern division thought to be an issue. Reporting has increased in recent years (except for Eastern Division). Media attention and advocacy thought to have made reporting more accessible. Issue for victims to return to community – no support services for victims.
	Unintentional injury, drowning, burns		Yes	Yes		Mortality data shows high number of adolescent deaths. Fishing and farming accidents reported by clinicians. Data available GBD and published research. Paediatricians report increasing number of burns presentations.

	Motorised vehicle injury (car, boat)		Yes	Yes		Research data and reports available.
	Respiratory: pneumonia and asthma		Yes	Yes		Excellent data on pneumonia available through NVEP. Asthma rates reported to be high. Limited data.
	Vaccine preventable diseases		Yes	Yes	HPV only	EPI policy- includes HPV vaccine for adolescent girls (coverage >95%) Typhoid is endemic in some regions of Fiji (no access to vaccine). Good data from MoHMS/ MCRI/ WHO research. Highest Typhoid rates in adolescents . Influenza- outbreak in 2016- deaths of young pregnant women and children: vaccine distributed to at risk groups. Deaths and hospitalisations from pneumonia.
	Vector borne diseases		Yes	Yes		Some good data- mandatory reporting to MoHMS and WHO: surveillance requires enhancement. Dengue outbreak nationally in 2014-15. Emergence of Chikungunya and Zika fever in recent years: testing commenced in 2016 for suspected cases. Wellness programme through CHWs focus on village clean up and vector control.

	Sight, hearing, speech					Limited information and data
	Oral health		Yes		Yes	All primary schools visited annually by oral health team – provision of free preventative and curative care to < 15 years old. Older adolescents have to pay - this limits access and Oral Health team does not currently visit secondary schools. This was considered a barrier to good outcomes as adolescents only access for curative services.
	Diabetes		Yes	Yes	Yes	No data available to include.
	Rheumatic Heart Disease		Yes	Yes	Yes	Good data for prevalence, incidence, mortality and cost of illness. Secondary prophylaxis rates low- particularly challenging in adolescents. Transitional service not in place- many adolescents become lost to services after 15 years. Pilot support groups and activities undertaken in 2016 to increase engagement of young people in their health care.
	Disability		Yes		Policy in draft	Limited anecdotal information and data.

APPENDIX 5 GLOBAL BURDEN OF DISEASE STUDY 2013: CAUSES OF DISABILITY ADJUSTED LIFE YEARS 10-24 YEARS, FIJI



Source: Global Burdon of disease data 2015. Institute of Health Metrics and Evaluation, University of Washington. USA accessed October 2016.

APPENDIX 6 MOHMS NATIONAL STRATEGIC PLAN 2016-20 KEY PRIORITY AREAS

Priority Area 1: Non-communicable diseases, including nutrition, mental health, injuries

This Priority Area (PA) focuses on strengthening the "settings" approach to Wellness and multi-sectoral engagement to slow the growth and eventually halt the NCD epidemic. This PA covers the need for multi-sectoral action and the need for appropriate legislation as detailed in the National Wellness Policy (NWP). The NWP is MoHMS overarching policy guiding the "Health in All Policies" approach.

Priority Area 2: Maternal, infant, child and adolescent health

This PA focuses on earlier and expanded antenatal care; improved emergency obstetric services and continuum from birth through adolescence. This PA covers the whole continuum to ensure that children are nurtured in body and mind from birth till adolescence. This PA has a total of 28 indicators (Listed in Appendix 5)

Priority Area 3: Communicable Disease, Environmental Health, and Health Emergency Preparedness, Response & Resilience

The key themes in this PA are better surveillance and outbreak prevention/control, climate change adaptation and health emergency resilience.

Priority Area 4: Expanded Primary Health Care (PHC), with an emphasis on providing a continuum of care and improved service quality and safety

This PA focuses on strengthening Primary Health Care with an emphasis on community empowerment and engagement as well as through building effective partnerships to foster this, in order to improve accessibility of Primary Health Care services in urban, rural and remote areas.

Priority Area 5: Productive, motivated health workforce with a focus on patient rights and customer satisfaction

This PA focuses on service provision through a caring and customer focused approach as well as the work satisfaction of staff. This focuses on creating a conducive environment for MoHMS employees to work in as well as the quality of services provided to customers.

Priority Area 6: Evidence-based policy, planning, implementation and assessment

This PA focuses on establishing effective governance and accountability framework from an evidence based perspective and strengthening policy and planning.

Priority Area 7: Medicinal products, equipment & infrastructure

Resource gaps are seen as a major deterrent to achieving HI vision. This PA focuses on expanding access to high quality essential medicines through effective supply chain management in order to meet population needs. A few indicators are mentioned below:

Priority Area 8: Sustainable financing of the health system

This PA focuses on ways to improve health financing to support equitable access to quality services and provide financial risk protection. The general objective is to improve financial sustainability, equity and efficiency.

APPENDIX 7 MAPPING OF ADOLESCENT HEALTH PROGRAMMES AND SERVICES 2016.

This appendix outlines the programmes and services found relating to adolescent health and well-being in Fiji.

SOCIAL DETERMINANTS

Environmental

Many youth groups work around environmental issues (Communication Ministry of Youth meeting, August 2016). Youth and adolescents are effected by the impacts of flooding, recent cyclones, droughts affecting food security and Water, Sanitation and Hygiene (WASH). Government Ministries and NGOs work with communities to improve sanitation and hygiene, food security and vector control.

Education

Access to Education

Universal free access to education was established in 2014 for all children from class one to year 12. Attendance to year 12 is now compulsory and free for all, a small proportion of students complete year 13, which is required for university access. Vocational training colleges and two universities exist in Fiji, offering Fijian and other Pacific Islander students a variety of training and education opportunities.

The Ministry of Education, Heritage and Arts deliver a standardised curriculum in all schools termed the "Family Life Programme". This programme covers topics such as puberty changes, sexual and reproductive health, sexually transmitted disease, tobacco and alcohol use. A copy of the curriculum was not sourced during the review. High school students, teachers and a school principal interviewed during this review stated that the programme largely focused on SRH and STIs and was delivered, at least in the senior years of school, for one hour each fortnight by a designated teacher.

School Health Programme

The MoHMS school health programme visits every primary school child each year to undertake health checks. The health check includes basic sight, hearing, nutrition assessment and general health review. This service is not currently extended to high schools. The school health teams generally comprise of nurses, a dietitian, environmental officer and peer educator. In 2015 the Ministry of Education developed a School Health Policy, the policy outlines the approach and requirements for school health visits. Access to high schools was reported to be difficult and visits by health teams and NGOs were arranged on an individual basis.

Employment

The Ministry of Tourism and Trade works with youth groups, community, church groups and womens' groups at a grass route level to provide training in financial literacy, business planning and funding grants (FJ $30,00-100,000 for 2 years) for start up businesses for young people. Work is undertaken

through integrated rural development groups to engage and empower young people and build employment capacity and skills. They currently support 28 projects an have reinvested in earlier projects that were devastated by Cyclone Winston. Eg fishing, seaweed farming, honey production. The Minsitry of Tourism and Trade work closely with the United Nations Development Project (UNDP) to deliver support and training.

Poverty

A new report has found that Fiji is at forefront in the Pacific with social protection programmes, in particular the Care and Protection allowance that reaches at least 5,000 vulnerable children throughout Fiji.[24] The Care and Protection allowance is provided as a way to lessen poverty with the provision of a monthly cash allowance and food vouchers to poor and vulnerable children. The cash allowance and food voucher help poor families in providing a minimum level of nutrition, health, education and care that the children need. Although the Assessment highlighted the many achievements of the Care and Protection Allowance, it also made several recommendations, including the need to increase the current coverage from 5,000 to 18,000 children, and the need to ensure a clear focus on the most vulnerable groups, such as single parent families, children and caregivers with disabilities.

Food Security

Policy and programmes exist and are delivered through various NGOs and government ministries.

Housing

Policy and programmes exist and are delivered through various NGOs and government ministries.

Child Protection and safety

Fiji has implemented the Child Rights Convention recommendations. Fiji has a Child Welfare Decree on Mandatory Reporting and protection of the rights of children and adolescents are included in the Crimes Decree on child trafficking and commercial sexual exploitation of children (CSEC). A Zero Tolerance Violence-Free Community and school policy is included in the Child Protection Policy. There is a specific budget allocation for child protection supported through the Ministry for Women, Children and Poverty Alleviation. A Child Helpline was established in 2015 manned by Medical Services Pacific. New initiatives such as the Bus Fare and Milk Programme; free education including kindergarten. A recent report highlighted challeges in child protection including: archaic legislations, limited resources, limited technical capacity, paucity reliable and available data; community mindsets, lack of coordination and duplications of services.

At the divisional level, child protection clinics run at CWMH childrens' outpatients on an as-needs basis for children and adolescents identified clinically as being at-risk of abuse or neglect. The health worker

[24] Child Sensitive Social Protection in Fiji: Assessment of the Care and Protection Allowance report. UNICEF 2015

guidelines provide clear direction and advice for health professionals at all service levels in how to respond to various presentations of potential or substantiated cases of abuse or neglect. They also provide clear guidelines for reporting and recording. Health worker training packages (1 and 3 day) in Child Protection have been developed in collaboration with Sydney Children's Hospital and UNICEF Pacific. The one day training is delivered to doctors and nurses as an add-on to WHO Pocketbook training and is sometimes attended by people from other agencies. A three day training course, is supported by a visiting paediatric child protection specialist from Australia who has been self-funded to date and who also provides remote clinical support to local clinicians between visits.

While primary and secondary prevention measures are recognised at a policy level to be important, it is not clear whether available routine data sources can or have been disaggregated or supplemented through other methods (e.g. qualitative research) to identify the most at-risk population sub-groups in order to direct preventive strategies. While primary and secondary prevention measures are recognised at a policy level to be important, it is not clear whether available routine data sources can or have been disaggregated or supplemented through other methods (e.g. qualitative research) to identify the most at-risk population sub-groups in order to direct preventive strategies. No data was accessible during this review.

Social Infrastructure including access to transport

Free school buses to schools in zone were introduced in 2015. The cost of transport from remote and maritime areas is expensive, which is thought to provide limitations for high school attendance. Many adolescents from rural area attend boarding school.

Justice

Young people aged less than 18 years cannot be incarcerated in adult prisons in Fiji. There is a residential "Boys centre" in Suva where young men are sent for counselling and rehabilitation if charged with a crime. Once they are 18 years they pass into the prison system. There are no similar centres for young girls. The Police Juvenile Unit reports the majority of crimes committed by adolescents involve theft, however drug related crimes (possession and sale of banned substances) and sexual crimes are becoming more widespread. The Police Juvenile Unit has a community police division that works closely with young people in the community to engage them in activities and provides information and resources on safety, life skills and crime prevention.

Youth Engagement

The Ministry of Youth and Sport (MoYS) undertakes programmes, primarily targeting youth groups, that engage adolescents and young people (15-35 year target age) to encourage youth empowerment and engagement. Programmes focus on life skills, sexual and reproductive health, preventing teen pregnancy, working with young mothers, providing information and resources on substance abuse and encouraging engagement in sport. The MoYS works with the Fiji Sports Commission to assist with the development of youth sport programmes delivered in the community.

HEALTH RISKS

Substance use

Peer educators and Family Life curriculum delivered in schools as well as the Police Community unit provide information to adolescents through youth groups, community and school sessions. Activities and resources do not appear to be universal or standardised and are often delivered at the request of a school, community or youth group.

Physical Inactivity

Ministry of Youth and Sport collaborate with youth group and Fiji Sports Association to encourage youth participation in sport.

Nutrition

The MoHMS focus has largely been on under 5 year olds with a number of actions and programmes including: the introduction in 2016 of the Integrated Management of Acute Malnutrition (IMAN, UNICEF) training nationally. Breast feeding, infant and maternal nutrition have been targeted through an ANC focus, Infant and young child feeding programme (IYCF) and the baby friendly hospital programme. The National micronutrient programme (NIMs) has a focus on delivery of micronutrients and Albendazole to primary school aged children (6-12 years), however delivery has been ad hoc and limited due to stock outs, lack of coordination and no defined budget.[25] This has resulted in <15 % national coverage in school aged children in recent years. The NIMs report states that dietitians and the nurses were expected to raise awareness in their communities without resources of forward planning. The NIMs team report that most health technical staff who worked in areas related to the targeted populations had no or very little knowledge about the supplementation programme supplements.

Save the Children Fiji, partnering with the MoHMS undertake community nutrition projects in vulnerable communities and have developed a toolkit aimed at increasing community knowledge of nutrition and improving food security at the community level.

The MoHMS nutrition activities and programs are guided by the Fiji Nutrition Plan for Action. The MoHMS produce many health promotion materials (posters) on nutrition, which are widely available at health clinics throughout the country. The Ministry of Education launched a school health policy in 2016. There are large gaps in available data for malnutrition and food security in relation to adolescents in Fiji.

Sexual Risk

There is some evidence of early sexual debut (teenage pregnancy in <14 year olds). However no programmes specifically target this area. Free condoms are available in dispensers in main cities.

[25] MoHMS NIMs report 2014

HEALTH OUTCOMES

Communicable disease, maternal and nutrition

Sexual Reproductive Health Services

There are adolescent/youth drop in centres in 3 main cities, integrated centres elsewhere designated as adolescent friendly. They provide SRH counselling, contraception distribution (free condoms), family planning, VCCT, pap smears, pregnancy testing and referral services. "Our Place " in Suva provides a 'quiet place' for youth to come and talk, have clinical tests (STI, pregnancy) and get results In it's early days "Our Place" provided opportunities for youth to learn life skills such as cooking and sewing, however over time the services have become focused on SRH. Due to it's location in the centre to town and close to areas where sex workers are located they reports seeing a lot of sex workers and school aged children. They also cater for the Lesbian, Gay and Transgender (LBGT) population. There appears to be less stigma associated with young people attending this centre, as it is considered to offer multiple services, where as other youth services in Suva are solely focused on Reproductive health counselling or STI testing. In Lautoka there are two centres that young people can use as drop in centres: *My Place* which provides mainly SRH support and the *Rainbow Centre* that provides support to LGBT young people. Empower Pacific have assisted these centres with counselling support and funding assistance through external grants.

From 2008 to 2012 UNFPA providing technical and funding support to set up the YFH centres, which originally consisted of 25 centres (including the three stand alone YHHCs in the main towns) and train the original peer educators, however over the past 4-5 years this programme has been limited by funds. There is no adolescent officer in position at the MoHMS and there has been a lack of coordinated training, support or supervision for the peer educators.

Sexual and Reproductive Health services are accessible to adolescents, however access to contraception appears to be limited by the requirement of adolescent aged less than 18 years to provide parental consent. SRH services and information appear to be more considered in terms of youth friendly health services, however they remain based at the Divisional hospitals and access to information, resources and service appears to be limited throughout the remainder of the country. Stigma in accessing a SRH clinic is reported to be high, particularly in rural areas. The small number of adolescents spoken to during this review indicated that they had access to good information related to SRH either through school Family Life Programme, youth groups or church groups. Some adolescents reported accessing the internet for information, however this access appeared to be mostly limited to urban youth from more affluent families.

Support for Sexual Reproductive Health Programmes

The MoHMS Peer Education programme has 16 peer educator positions nationally (one per sub-division- however some roles remain unfilled), their focus has been largely on providing SRH information and assisting school health teams with visits to primary schools. The Peer education programme does not have standardised training or defined roles or reporting, monitoring and evaluation frameworks. Peer

educators work in their communities based out of health centres and report to their sub-divisional nurse on a monthly basis. Their salaries are relatively low ~FJ$12,000 per annum and there is currently no framework for them to transition from this role over time. A number positions were reported to be vacant nationally and there appears to be no defined recruiting process for replacing peer educators who have resigned.

Through the Ministry of Education a Family Life programme is delivered in high schools as part of the national curriculum. This module focuses on SRH and prevention of STIs. UNFPA has provided support largely historically to assist the MoHMS set up youth friendly health services. More recent funding has assisted with targeting young people in cyclone devastated areas. However, UNFPA plan an Adolescent situational analysis for late 2016 with support of IPPF and the University of Melbourne. This is aimed to include roll out of Y Peer training and evaluation modules. Y peer is one of the many adolescent health packages that have been adopted by various Ministries and NGOs in Fiji over the past 10 years. More recently the 'Stepping Stones' package has been the tool used by the MoHMS (funded by DFAT).

Small NGOs undertake some SRH counselling and advocacy eg Medical Services Pacific (MSP) have accessed some high schools to provide resources and advocacy. MSP maintain a child help phone service and produce high quality educational brochures for young people that focus on puberty, development, SRH and STI prevention[26].

Access to contraception for adolescents

The legal age of consent in Fiji is currently 18 years of age. Therefore adolescents seeking contraception have limited options (free condoms and counselling by nurses and doctors at drop in SRH centres being the main option). The Womens' Reproductive Health Centre staff in Suva report that the majority of the adolescents they see come accompanied by their parents, who provide consent for contraception (Jadelle implant, IUD, contraceptive injections). Most adolescents in this category are reported to be school students aged between 15-18 years, however parents also bring young adolescent in for contraceptives if they are working as sex-workers to support the family. The Centre staff report sending unaccompanied adolescents home with a letter to obtain parental consent and then not seeing the young person again until they present for emergency contraception or with an unplanned pregnancy. "Our Place" in central Suva report seeing more adolescents presenting without their parents knowledge. In Labasa and Lautoka the HUB centre staff report similar information, however the Labasa staff reported that they do not provide contraception to under age adolescents. None of the health professionals at the HUB centres were able to report any training that they had attended to assist them to counsel adolescents. The peer educators at the Suva and Lautoka HUB centres reported various levels of training in SPH and young peoples health; including Y Peer and Stepping Stone modules. All peer educators that were interviewed considered stepping Stones as a more comprehensive and relevant training package.

[26] http://msp.org.fj

STI prevention

The main focus of Peer education programme to date has been focused on STI prevention and contraception. VCCT counselling is undertaken by nurses and peer educators at the drop in HUBs and in recent years nationally by Empower Fiji (Funded through FHSSP/ DFAT). Due to the high rates of cervical cancer in adult women in Fiji Human Papillomavirus (HPV) vaccine was introduced in 2013 for adolescent girls. [31] Greater than 95% coverage rates have been achieved for the two dose regimen.

Teenage pregnancy

Pregnant teenagers are seen in ANC. All teenage pregnancy, aged ≤ 18 years are considered 'high risk' and are advised to deliver at Divisional Hospitals. All pregnant teenagers aged 18 years and less must be reported to Social Welfare Division and Police using a standard mandatory reporting form. If a teenager aged 18 years at presentation has conceived prior to turning 18 she is also reported. Reported cases may be investigated and prosecuted if rape or defilement is suspected or reported. Increasingly younger pregnant girls are reported by the Obstetricians and midwives presenting to health services. A number of interviewees stated that there has been a focus through the MoHMS to reduce the number of teenaged pregnancies *but " nothing seems to have changed or had any effect".*[27]

Abortion is illegal in Fiji with the exception of abortion for medical reason, which requires the consensus of at least two consultants. Stakeholders interviewed reported that abortion is undertaking rarely. A number of stakeholders interviewed said that they think abortions are done outside MoH medical services, but no data or information was found to quantify this. Midwives at CWMH reported that vulnerable teenagers often present to maternity services. eg homeless, those who have been sent from the family home and are living with relative or in refugee at the *Home of Hope* or other shelters, including prison inmates. Prison inmates attend in uniform with a uniformed guard, which midwives reported greatly stigmatises them in front of other mothers.

Respiratory; pneumonia, asthma

No relevant programmes or policies.

Vaccine preventable diseases

The Expanded Program on Immunization (EPI) policy includes provision of HPV vaccine for year 7 girls. Influenza vaccine was made available to all pregnant women in early 2016, following and influenza outbreak that resulted in a number of maternal deaths. Typhoid and influenza vaccines are available through the private health system.

[27] Personnal communication Deputy Secretary for Public Health, Dr Rafai. August 2016

Vector borne diseases

The Ministry of Agriculture and MoHMS supports programmes to reduce vector borne disease. Discussions with zone nurses and community health workers in the Northern Division in February 2015 showed that there is an increasing community awareness of vector borne diseases and regular village 'clean-ups' were reported to occur in many villages and settlements, this was largely attributed to the success and impact of the CHWs mobilizing their communities following attendance at trainings.

Scabies and skin disease

There are no programmes targeting adolescents. A skin diagnostic and treatment module is included in the Fiji Integrated Management for Childhood Illness (IMCI) programme. This module is currently being adapted for inclusion in the Rheumatic Fever and Sore throat guidelines for older children and adolescents due to the high incidence of scabies, skin disease and associated morbidity in Fiji. Improved strategies are urgently needed to achieve control of scabies and its complications in endemic communities.

Intentional and non-intentional injury

Assault / Domestic Violence

The Fiji Women's Crisis Centre (FWCC) is an autonomous, multi-racial non-government organisation which was established in 1984. FWCC's goal is to eliminate violence against women in Fiji and throughout the Pacific region through an integrated and comprehensive program designed to both prevent and respond to violence, by reducing individual and institutional tolerance of violence against women, and increasing the availability of appropriate services for survivors. FWCC has it main centre in Suva and branches in Ba, Nadi and Rakiraki on Viti Levu in the Western Division, on Vanua Levu in the Northern Division. FWCC plans to open a fifth branch in Savusavu in the southern part of Vanua Levu within the next 2 years, along with two shelters for women in the Western and Northern Divisions and a shelter for girls in Suva. FWCC also manages a Regional Training Institute for the Pacific based in Suva. The child protection officer at UNICEF noted that there are no specific services targeting adolescent boys who are victims of assault and violence.

Gender based violence

Fiji Women's Crisis centre, Medical Services Pacific (limited to Suva area) and Empower Fiji hold Memorandum of Understandings with the MoHMS and provide counselling services, including outreach (Empower Fiji). Considering the accompanying health, social, economic, development and intergenerational consequences, few problems have a more lasting and large-scale effect than violence against women and girls. Despite the severity and extent of gender-based violence, services for survivors are limited and virtually non-existent in remote areas.[24]

Unintentional Injury, drowning, burns

No programmes or polices were located during the review.

Motorised vehicle injury, boat, car

A Road safety campaign consisting of billboards with safety messages is currently visible nationally in Fiji. No programmes or policies directly targeting adolescents were found.

Chronic disease, including mental health and substance abuse

Mental Health

The MoHMS Mental Health team has developed a Mental Health strategy and Policy (2016) as well as a business plan. With frequent turn over, staff attrition and lack of qualified psychiatrists nationally there appears to be many gaps in implementation and services.

Mental Health services both clinical and public health are largely lacking in Fiji. Preventative services are fragmented and ad hoc. A number of small NGOs and church groups provide life skills programmes in high schools and through youth groups but these appear to be ad hoc, lacking standardised materials and training and vulnerable to limited access to high school students.

The MoHMS with support from WHO has provided MHGap training to 600 nurses and doctors using the standard WHO modules since 2015. To date more than 680 health professionals have received training in MHGap. The emphasis on training has been with the core modules for anxiety, depression, psychosis, substance abuse.. The two child health modules developmental and behavioural disorders have not yet been taught.[28]

The understanding of mental health issues in the community, as reported by the MoHMS Mental Health team, focuses on psychosis, with little understanding about anxiety, depression and other mental illness. Mental illness in Fiji is widely considered to be due to marijuana psychosis or a 'curse' placed on the individual. Both Empower Pacific senior staff and the only child psychiatrist in Fiji report that there is little or not understanding of anxiety and depression as a factor affecting people in Fiji; however Fiji has one of the highest rates of youth suicide globally.

Empower Pacific have trained 56 counsellors using a standardised one year training course adapted for Fiji that is endorsed to meet the Australian Counselling Association standards. Counsellors that complete the course have 1- 2 years supervised experience before they are accredited as level 2 counsellors. From 2017 this course will be delivered through the University of the South Pacific with support from Empower Fiji and the Ministry of Education. To date Empower Pacific has been the only organisation in Fiji to deliver accredited counselling training and many of the counselors trained over the past 10 years are now working for other NGOs and Ministries within Fiji.

The University of the South Pacific also facilitate an Applied Psychology Diploma, this diploma also

[28] Mental Health (MH)GAP Intervention guide for mental, neurological and substance use disorders in non-specialized health settings. WHO.2010

includes a counselling module. All organisations that provide counselling and mental health support reported an enormous increase in demand following Cyclone Winston in February 2016.

Both Empower Pacific and Medical Services Pacific hold a Memorandum of Understanding with the Ministry of Health, Ministry of Social Welfare, Ministry of Police and Ministry of Education. Empower Pacific provides counselling outreach services to all regions of Fiji, however their office spaces are limited the three main cities. MSP is based in Suva opposite CWMH and also has a drop in centre for youth on it's premises and has a full-time gynaecologist employed as well as counselors that provide rape and SRH counselling.

Substance abuse

No services or programmes were identified with an adolescent focus.

Clinical services for Mental Health

Clinical and services for mental health are severely limited. There is one psychiatric hospital in Fiji, St Giles Hospital in Suva, plus 'Stress Management Wards' at the three Divisional Hospitals. St Giles Hospital is critically understaffed and at the time of this review wards had been closed due to lack of staffing. Adolescents are usually admitted into adult wards both at St Giles and at Sub-divisional and Divisional Hospitals are there are no specific clinical in or out patient services currently for adolescents. The only child psychiatrist in Fiji works as an academic researcher at the Fiji National University, and provides some volunteer assessment services for the court system.

Suicide

Suicide is the second leading cause of death globally in adolescents aged 15-29. The risk factors for suicide and attempted suicide include health system and societal factors such as stigma against mental illness and difficulties accessing healthcare; community and relationship factors such as discrimination and abuse; and individual risk factors including a family history of suicide (World Health Organization, 2014). The Mental Health team at MoHMS in partnership with WHO have delivered the Mental Health (MH) GAP training to >600 health professionals since 2015. World Suicide Prevention day sessions are undertaken in all schools in Fiji in August each year. Few other resources or services focusing on youth suicide were found during this review.

Rheumatic Heart Disease

Fiji has had a coordinated RHD prevention and control programme since 2005, however the programme has only recently been able to expand nationally (2014) on receipt of a large funding grant from New Zealand Aid. The RHD programme sits within the Wellness Unit at the MoHMS, led by a National Project leader, Project Officers, three Divisional Nursing Coordinators and three field assistants. The programme aims to improve diagnosis, management, health education and awareness of ARF/ RHD in Fiji with the intention of reducing morbidity and mortality.

Over the past 18 months there has been increased programme ability to undertake surveys of health

professionals and community members to allow the programme to target gaps in services and coverage. A pilot project is underway in 13 clinics nationally to pilot interventions that are aimed to improve patient participation, increase awareness and accessibility to ARF/ RHD care. These pilot projects have included a RHD fun day held in 2015, the development of parent and child support groups and the development of a closed user Facebook page. None of these activities are currently focused on adolescents. However, adolescents have been involved in all pilot activities. Coverage of the programme has been substantially increased since large scale funding was made available in 2014, however the RHD Divisional Nursing Coordinator positions have not yet been secured beyond the end of 2018 (NZAid funding), placing national coverage in a fragile situation into the future.

Three key gaps highlighted during the review were:

1. Very poor secondary prophylaxis adherence rates, which increase with age throughout adolescence and young adulthood.

2. A drop in facility for adolescents with ARF/ RHD to liaise with peers, obtain their monthly injections and access health information removing the need for older adolescents to miss school, university or work to attend busy day time general clinics.

3. A lack of adequate transition services for RHD patients to move from paediatric based clinical services to adult services. It is well recognised by local clinicians and the RHD programmes that many adolescents cease their secondary prevention medications or become poorly adherent once they move from paediatric to adult services. The paediatric clinical services at the main hospitals deliver injections to children as they drop in on the way to school. To access adult clinics for review and injections they have to wait in line and may not be seen in a timely manner. A transitional adolescent clinic and support service was highlighted as an unmet need for RHD and other young patients with NCDs or long term health conditions.

Oral Health

Oral health data show that there have been substantial advances in the reduction of dental carries over the past 10 years for all age groups less than 14 years, however oral health reportedly deteriorates beyond age 15 years.[29] A significant barrier for adolescents identified by the Oral Health team is the *requirement to* pay for service once aged 15 years. Oral health care is provided free for children aged less than 15 years and school health teams visit every primary school in Fiji. Coverage of high school students is limited and school visits ad hoc.

Diabetes

Diabetic guidelines are published by the MoHMS. Specialist Diabetic clinics are located in Suva and Lautoka. The Wellness Unit advocates for healthy eating, regular exercise and weight control to attempt

[29] Personal communication Dr Joan Lal. MoHMS Oral Health Officer. August 2016

to counter the large burden of type 2 diabetes in Fiji.

Disability

Disability services are limited for children and adolescents in Fiji. The MoHMS have recognised this and inter sectoral work to address many challenges experienced by children and adolescents with disabilities is underway. The draft Fiji Ministry Health Action Plan for children with Disabilities 2014-2016, identifies many challenges experienced by children with disability and developmental difficulties in Fiji including weak early detection and intervention systems, poor referral pathways within health and between sectors, barriers accessing routine health and education services, lack of access to aides and equipment and inadequate human resourcing in the sector. Clinically, developmental clinics at divisional hospitals continue to rely on support from visiting specialists. Child development modules have been incorporated into undergraduate training but training for nurses and graduate doctors in child development and disability remain limited. Access to physiotherapists remains limited and to the reviewer's knowledge there are no permanent speech or occupational therapists providing services in Fiji. Rather these services continue to rely heavily on overseas volunteers. Systems of developmental screening, surveillance, early detection are weak. Intervention for hearing and vision impairment are being developed in some areas (e.g. high risk newborn hearing screening) but these are still very limited and follow-up systems including access to equipment and habilitation services are poor. In recognition of these challenges, the draft Fiji Ministry Health Action Plan for children with Disabilities 2014-2016 was developed but has not yet been taken further at a policy level.

The Hilton Special School located in Suva caters to children and adolescents with intellectual disabilities. There are limited facilities outside Suva. *Project Heaven* funded through Australian DFAT provides vision screening and ophthalmology services throughout Fiji. Fiji is visited be the Fred Hollows Foundation and other international teams providing fly in fly out specialist services eg. Audiology.

Clinical Services

There are currently no dedicated inpatient wards for adolescents in Fiji and the majority of adolescents (aged >15years) are admitted and reviewed by adult services (including psychiatry). Adolescents are seen in hospital outpatients either in mixed paediatric clinics, or if aged over 15 years in adult clinics. There are no transitional services available for children with chronic conditions moving from paediatric to adult services. Eg Rheumatic and congenital heart disease and diabetic patients. The lack of transitional service and adolescent acute care facilities were nominated by many medical staff interviewed as serious impediment impacting on long term outcomes for patients with chronic disease.

APPENDIX 8 NATIONAL YOUTH COUNCIL IN FIJI: YOUTH VOICES IN TRANSITION DECLARATION 2015

Section relating to Youth Health

The right to health is a fundamental human right, especially for Youths. It is therefore pivotal that the Government should prioritise and provide, monitor and evaluate access of Youth Friendly Services (Including Mental Health Care, Sexual and Reproductive health and Rights and Physical Health), that are of quality, integrated, equitable, comprehensive, affordable, confidential, accessible, acceptable and free from stigma and discrimination for all young people.

We call on Government to strengthen its commitment to provide comprehensive sexual and reproductive health services that include adolescent and youth friendly, safe maternity care, contraception, HIV and STI prevention, care, treatment and counselling to all young people. We further call for the review of the current policies that create barrier to these services.

Governments should ensure that all healthcare providers receive training on youth specific health issues and provisions of adolescent and youth friendly services through pre-service and in-service development.

Government should also implement financially sustainable policies and legal frameworks that protect, promote and fulfill the reproductive and sexual rights of all young people regardless of the sexual orientation and gender identities.

APPENDIX 9 LIST OF ACRONYMS AND ABBREVIATIONS

ACP	Annual Corporate Plan
ANC	Antenatal care
ART	Anti-retroviral therapy
ARF	Acute Rheumatic Fever
AQEP	Access to Quality Education Program
CHW	Community Health Worker
CI	Confidence Interval
CMRIS	Consolidated Monthly Reporting Information System
CSE	Commercial Sexual Exploitation
CSN	Clinical Services network
CWMH	Colonial War Memorial Hospital
EPI	Expanded Program on Immunization
FHSSP	Fiji Health Sector Strengthening Program
FiBOS	Fiji Bureau of Statistics
FNU	Fiji National University
GBD	Global Burden of Disease
HPV	Human Papillomavirus
HIU	Health Information Unit`
HIS	Health Information System
HIV	Human Immunodeficiency Virus
IHME	Institute of Health Metrics and Evaluation, University of Washington, USA
ILO	International Labour Organization
IMCI	Integrated Management of Childhood Illness
IR	Incidence Rate
M&E	Monitoring and Evaluation
MCH	Maternal and Child Health

MDG	Millennium Development Goals
MoE	Ministry of Education, Heritage and Arts
MoHMS	Ministry of Health and Medical Services
MoTT	Ministry of Trade and Tourism
MoY &S	Ministry of Youth and Sports
MSP	Medical Services Pacific
NCHP	National Centre for Health Promotion
NGO	Non-government Organisation
NMHSPP	National Mental Health and Suicide Prevention Plan
NSP	National Strategic Plan
PATIS	Patient Information System
PATIS Plus	Patient Information System (2015 updated version)
PHIS	Public Health Information System
PLS	Paediatric Life Support
PPTCT	Prevention of Parent to Child Transmission
RHD	Rheumatic Heart Disease
SCF	Save the Children Fund
SDG	Sustainable Development Goals
SRH	Sexual and Reproductive Health
STI	Sexually Transmitted Disease
TB	Tuberculosis
UNDP	United Nations Development Program
UNICEF	United Nations Children's Emergency Fund
UNFPA	United Nations Population Fund
UN Women	United Nations Women
VCCT	Voluntary Confidential Counselling and Testing for HIV
WHO	World Health Organization

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PART B: ADOLESCENT HEALTH STRATEGY: RECOMMENDATIONS AND IMPLEMENTATION PLAN

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PURPOSE OF THIS SECTION

This section builds on the preceding sections of this document to recommend a strategy for improving the health and wellbeing of Fijian adolescents.

The first section of this document described the health needs of adolescents in Fiji, poorly described to date. It identified that Fijian adolescents experience an excess burden of poor health, which has not improved substantially over time. Communicable disease, under and over nutrition and poor sexual and reproductive health are common health needs for Fijian adolescents. Violence and unintentional injuries are important causes of preventable morbidity and mortality, particularly for males. There is also a very large burden of non-communicable disease, including chronic physical illness and mental disorder. Health risk behaviors including substance use, physical inactivity and sexual health risk were found to be common. These outcomes and risks relate to the disadvantage that many Fijian adolescents experience across the social determinants of health. Given many outcomes and risks share common determinants, comorbidity is likely to be common.

The second section of this document mapped current programmes and approaches for adolescent health in Fiji. While many programmes relating to adolescent health were identified, there are a number of reasons why these programmes may not be resulting in improved health outcomes for adolescents. Firstly, it appeared that many programmes are not aligned with health needs of Fijian adolescents. Programmes for some health needs were absent (for example, mental health). Additionally, existing programmes did not always meet the needs of particular risk groups (for example, programmes relating to sexual and reproductive health largely catered for older and married adolescents). Secondly, programmes tended to focus on discrete issues and were poorly integrated and coordinated with other programmes, likely to introduce barriers for access. Thirdly, many programmes were funded for only short time periods, this sporadic funding likely to translate to sporadic programme delivery. Fourthly, programmes and approaches to adolescent health in Fiji remain poorly evaluated, their reach and effectiveness largely unknown (introducing barriers to taking these programmes to scale). Finally, current approaches to adolescent health in Fiji largely exist in a legislative context that is restrictive to addressing many key needs of adolescents.

This section considers the needs of adolescents and the strengths (and limitations) of existing programmatic approaches to recommend an adolescent health strategy for Fiji. The strategy includes recommended actions, with some guidance around implementation provided.

RECOMMENDED ACTIONS AND THEIR IMPLEMENTATION FOR ADOLESCENT HEALTH IN FIJI

The health needs of adolescents relate to health outcomes, health risks and the social determinants. The recommended actions presented here largely focus on addressing health outcomes and risks given these are the immediate focus of the Ministry of Health. It should be noted however that many stakeholders consulted highlighted that the poor health outcomes experienced by adolescents in Fiji is likely to stem broader determinants including poverty, social disadvantage and marginalization. Creating safe, protective and empowering environments so that adolescents can thrive is an important consideration for all ministries of Government, including the Ministry of Health. Specific considerations relating to adolescents include promoting social norms that enable adolescents to have voice, ensuring adolescents have access to education, and approaches to justice that rehabilitate and divert young offenders.

The adolescent health strategy includes three key recommendations to improve adolescent health in Fiji, outlined in Box 1.

Box 1. Key recommendations for addressing adolescent health in Fiji

1. **Extend** health coverage for adolescents to better meet their health needs:
    - Improve the adolescent friendliness of health services;
    - Introduce and/or strengthen actions relating to priority health needs:
        - Communicable diseases including pneumonia and RHD
        - Nutritional disease including iron deficiency anaemia and obesity
        - Poor sexual and reproductive health including adolescent pregnancy, gender based violence and STI
        - Mental health and suicide
        - Unintentional injury including drowning and road traffic accidents
        - Health risks including substance use, physical inactivity and sexual risk behaviour.

2. Invest in **preventive** actions that extend beyond health services:
    - Introduce and enact legislation that protects the rights of adolescents, including the right for adolescents to access the services they require;
    - Collaborate with other sectors, particularly schools and community

3. Ensure efficiency and **accountability** of adolescent health actions:
    - Consult and engage youth in the design, implementation and evaluation of adolescent health programmes and services;
    - Invest in epidemiological research to address data gaps to better understand the needs of adolescents in Fiji
    - Build the evidence base with respect to programmes and interventions for adolescent health in Fiji, including evaluation of programmes and interventions.
    - Monitor the progress of actions towards adolescent health through indicators embedded in policy.

EXTENDING HEALTH COVERAGE TO BETTER MEET THE NEEDS OF ADOLESCENTS

A core focus of this strategy is addressing the excess burden of disease, injury and risk experienced by Fijian adolescents. Treatment for disease and injuries is typically addressed through health services. Health services also play an important role in screening and addressing health risks such as obesity, and providing evidence based health promotion. While Fiji has an established network of health services and referral process, adolescents experience barriers to access, particularly related to stigma, financial cost and ability to provide consent for services. Health care providers and health services may also not be equipped to respond to some of the needs of adolescents, particularly those relating to mental health and substance use.

ADOLESCENT RESPONSIVE HEALTH CARE

Adolescent responsive (or friendly) health care ensures that adolescents do not experience significant barriers to access, and that they are provided with the care that they require. While many models of adolescent responsive health care exist, the focus should be on integrating adolescent friendly principals into existing government facilities (particularly at a primary level). There is limited evidence for standalone youth-only clinics or centres, these approaches are often expensive and their coverage typically limited to urban populations, older adolescents and those that are married.

There are four key interventions to improve the adolescent friendliness of health services. Firstly, health services should introduce policies and procedures to ensure that adolescents can access the services they require. This may include polices around the minimum age that a young person can access the service without parental consent, and policies around appropriate referral pathways. Barriers such as financial cost and restrictive opening hours should be addressed where possible. Secondly, health care providers should receive competency-based training so they are skilled and knowledgeable around the key health needs of adolescents. Key competencies particular to adolescent health include counselling skills, the assessment of competence to provide consent and the provision of confidential health care. Training should also encourage attitudes that are supportive and welcoming of adolescents. Where possible, training should be aligned with available resources (for example, those available from WHO). Thirdly, facilities should provide age-appropriate physical spaces that ensure consultations with adolescents are private (visual and auditory privacy). Finally, there is a need to support demand for services. This includes informing adolescents of their availability and specific interventions to build community support.

While the majority of health related interventions are addressed through health services, opportunities for health action through other sectors (particularly schools) should be exploited. Schools would seem a particularly effective platform for delivery of health action given the introduction of free education up to year thirteen in 2012. Potential school based actions include screening for rheumatic heart disease, HPV vaccination, and school based health services which supply condoms and long acting contraceptives.

MATCHING ACTION TO NEED

Health actions delivered through health services need to be aligned with the priority needs of adolescents in Fiji. To date health actions delivered to adolescents in Fiji have largely focused on communicable disease and SRH. In the first instance, adolescent health in Fiji must be reframed as also including nutrition, injury, chronic illness, mental health and substance use. Health professionals and services must then be equipped to respond to these needs. Table 1 details some possible actions through the health system to address the broad needs of adolescents in Fiji.

INVEST IN PREVENTIVE ACTIONS THAT EXTEND BEYOND HEALTH SERVICES

Most of the poor health experienced by adolescents is preventable. Health risk behavior (related to future poor health outcome and intergenerational health) is also common amongst adolescents in Fiji. Prevention should therefore be a strong focus of addressing adolescent health in Fiji. Preventive actions typically involve sectors beyond the health system (Table 1). For example, preventive action for road traffic accidents (a leading cause of mortality in Fiji) includes road traffic legislation and policing of these laws. Prevention of suicide includes appropriate response to mental disorder (health system) and restricting access to means such as Paraquat.

Schools provide a particularly important platform for improving adolescent health. Health education particularly related to sexual and reproductive health, substance use and nutrition are effective interventions to improve health outcomes. The UNICEF life skills education programme provides a curriculum covering much of this content. Schools can also be health promoting environments. A school's policies and procedures, pro-social behaviours they model and the relationships between students and teachers can all be positive influences on adolescent health. Physical infrastructure at schools such as water and sanitation have a positive impact on menstrual hygiene management for females.

A large number of NGO organisations work in Fiji to support health service delivery and undertake programmes in partnership with government ministries to provide technical and specialist expertise (e.g. Empower Fiji provides counselling services nationally). Liaison with NGOs is crucial when planning strategies for targeting adolescent health and well-being as they often have access to marginalised young people and vulnerable groups that may not interact regularly with health and education services

Of the structural determinants, legislation that protects the rights of adolescents is an important action to address their health. Legislation should protect adolescents from coming to harm from others (for example, legislation that prohibits child marriage or sexual intercourse with a minor). Legislation should protect adolescents from being placed in harmful circumstances (for example, driving under the influence of substances, or driving without a seatbelt). Legislation should also enable adolescents access the services they require (for example, access to contraception for unmarried adolescents). Many examples of successful legislation exist in the region. For example, In Papua New Guinea a young person aged 12 years or over can provide consent for a HIV test without a guardian. This legislation

is based on laws in South Africa and to date there have not been any adverse outcomes of this legislation.

ENSURE EFFICIENCY AND ACCOUNTABILITY OF ADOLESCENT HEALTH ACTIONS

To ensure programmes are effective, young people should engage in their design, implementation and evaluation. Youth advisory committees and engagement with youth networks are some ways in which young people can make a meaningful contribution to policy and programme. Access to training, mentorship and resources is essential for adolescents to be effective in these roles.

While peer education is a common strategy to engage young people, there is limited evidence for peer education as an intervention alone in impacting on sexual and reproductive health outcomes. Peer education, as a component of a more comprehensive programme is likely to be a more effective approach.

A key finding of the review accompanying this strategy was the relatively poor quality data for adolescent health need in Fiji. This is compounded by the relatively limited nature of the evidence base for adolescent health actions. There is need to invest in better quality epidemiological data for Fijian adolescents (so as to better understand their needs). Given the poor quality of evidence for actions, programmes should be piloted and evaluated prior to be taken to scale.

Effective policy for adolescents includes a mechanism for monitoring progress. To this end, some key indicators of adolescent health need for Fijian adolescents are proposed in Box 2. **The final agreed indicators will be determined during the MoHMS stakeholder meeting on 7th November 2016**

Box 2 Proposed indicators harmonised with data availability

Determinants

- Secondary school completion rate (Years of education completed for 20 – 24 year olds)
- Adolescent birth rate (Births per 1,000 10 – 19 year olds)
- Unemployment rate (15-24 year olds)

Health risks

- Tobacco smoking
- Alcohol use
- Overweight and obesity
- Iron deficiency anaemia
- Condom use at last high risk sex

Health outcomes (key indicators from each epidemiological group)

- Communicable disease indicators (ARF incidence, pneumonia hospitalisation)
- Injury indicators (RTA mortality, homicide mortality, intimate partner violence, drowning)
- Mental health and chronic illness (suicide mortality, incidence impaired glucose tolerance and type two diabetes)

Health system response

- HPV vaccination
- Met need contraception
- adherence to RHD prophylaxis

Table 1. Recommended health actions for adolescents in Fiji.

This table summarizes recommended health actions for adolescent health outcomes and risks. For each health issue, relevant evidence based actions are shown in the first row (actions with an asterix [*] seem promising but have a limited evidence base), current actions in Fiji shown in the second row, with recommended actions shown in the third grey-shaded row. Actions are shown across four columns representing key sectors (structural determinants, health services, schools and community). Based on Lancet Commission for Adolescent Health and Wellbeing (Patton et al, 2016).

		Structural determinants	Health system	Education sector	Community based interventions
Communicable diseases	*Evidence based actions*		Early diagnosis and treatment Adolescent specific vaccination (Human Papilloma Virus, childhood catch-up) Deworming*		Deworming*
	Current actions and coverage (if known) in Fiji	Public Health Decree outlines mandatory reporting requirements	Mandatory reporting of communicable diseases to MoHMS e.g. ARF, Typhoid, Measles, Leptospirosis, TB, Leprosy, influenza etc Filarisis mass drug administration (includes deworming) but fragmented and ad hoc delivery HPV vaccination Skin sore and scabies treatment ad hoc	National media campaign for vector control post- Dengue outbreak and emergence of Zika Fever and Chickungunya. Health inspectors are included in school health programme run in primary schools. Extend school health programme to secondary schools.	Deworming through NIMs- ad hoc- not focused on adolescents. Village clean ups for vector control. Improved WASH supported by government and NGOs. Upgrade of toilet facilities and water tanks in villages. Advocacy and information for reduction of infectious and vector borne disease through communications unit. Peer educators conduct health awareness during disease outbreaks (dengue, typhoid)

	Recommendations		Strengthen preventative actions and advocacy for communicable diseases. Strengthen HIU reporting to report on age specific incidence data.	School health programme extended to secondary schools / WASH education. Improve bathroom facilities at schools.	Strengthen community engagement with WASH and vector control.
SRH, STIs Including HIV and Teenage pregnancy	Evidence based actions	18 yr minimum for marriage. Allow provision of contraception to legal minors**.** Abortion legalised for minors	Youth friendly SRH care including condoms and modern contraception including (LARC) available to all sexually active adolescents. Early HIV & STI diagnosis & treatment. Peer education and youth centre evidence weaker.	Quality secondary education - cash transfers. Comprehensive sexuality education . Safe schools with clean toilet facilities Support for menstrual hygiene in schools. School based SRH care.	Promote community support for sexual and reproductive health, and HIV health access for adolescents. Positive youth development. Peer education evidence weak. Peer educators conduct VCCT during outreach visits to communities.
	Current actions and coverage (if known) in Fiji	Only condoms free for adolescents to access without parental consent. Adolescents have limited access to modern contraceptives.	MoHMS peer education programme is fragmented and limited. SRH officer employed by MoHMS. Peer educators employed by MoHMS (many positions not filled, no standard training package or transition to employment pathways). AH Officer position (vacant for past 18 months)	Universal free primary & secondary school. Family Life skills programme delivered in secondary schools. Young girls leave school when pregnant/education incomplete.	MoY and UNFPA currently updating SRH manual used by peer educators. Stigma regarding teen pregnancy, especially in unmarried Fijians of Indian descent. Free ANC. Free medication - means tested (FJ<$20,000 pa). Drop in SRH HUBs and STI clinic in three main cities.
	Recommendations	Advocate to change legislation to allow access to all SRH services and programmes for minors.	Strengthen ANC and SRH services and programmes at the primary health level to improve access and reduce stigma.	Review and expand Family Life skills package. Support girls to continue education.	

Under-nutrition	Evidence based actions	Fortification of foods e.g. iron and folate, iodine	Screening and micronutrient supplementation	Healthy school meals, micronutrient supplements.	Micronutrient supplements particularly in pregnancy. Protein energy supplementation. Deworming. Cash transfer programme* Nutrition education*
	Current actions and coverage (if known) in Fiji	Fortification of flour. Food vouchers for all pregnant women. Food vouchers for vulnerable school children. School health teams undertake nutrition check annually for all primary aged children (up to 15 years age) School Canteen Policy.	Milk Supplementation programme to help disadvantaged and malnourished children. School Health programme with focus on the nutritional status of primary school students across the country, school lunches, school canteens and school gardens. Wellness Outreach visits in the communities. Food vouchers for pregnant women. NIMs programme coverage very poor. Frequent drug and micronutrient stockouts. No budget line in MoHMS for NIMs project. Nurses not trained in delivery of micronutrients. Strengthen post disaster food security.	School canteen policy. Food voucher programme- means tested for school children.	Save the Children working with vulnerable communities - health food choices, seasonal food security, community-farming initiatives (Fish, chickens, vegetables, eggs, etc.) Strengthen disaster preparedness.
	Recommendations	Enforce school canteen policy. Fortify foods, including rice.	Better data is required- regular surveys of nutritional status to include adolescents (including anaemia). NIMs programme strengthened, including provision of budget line to meet national requirement for procurement and delivery. Deliver NIMS	Enforce canteen policy. Targeted interventions in sub-divisions with poor food security. School health programme extended to secondary schools. Identify vulnerable adolescents and	Strengthen NIMs programme delivery.

			systematically and include secondary school aged children.	regions with high under-nutrition rates.	
Violence	Evidence based actions	Weapon control Protect women from violence and sexual coercion. * Youth justice reforms to promote second chances and diversion from custody.* 16 years as the minimum age for criminal responsibility.*	Trauma care.	Multi-component interventions that target violent behaviour and substance abuse.	Promote parent skills and parent -child communication. Positive youth development. Promote gender equity. Economic empowerment. Community training for awareness, knowledge and skills
	Current actions and coverage (if known) in Fiji	Child Protection guidelines and intersectoral agreement in place (national coverage- reported to be poor in remote Eastern Division) . Counselling and crisis services largely delivered by NGOs in partnership with MoHMS and MoE.	Child Protection guidelines in place, intersectoral agreement with local and national stakeholder organisations and ministries, including police. Services limited for victim support and counselling. Support and expand counselling services and skills. Eastern Division lacks services for counselling and CP. Train all health professionals in child protection.	Family Life skills programme delivered in schools.	Counselling and crisis services largely delivered by NGOs. Community police unit undertakes advocacy in communities and with youth groups. Senior police trained in child protection. Wellness CHW package delivered nationally.
	Recommendations	Victim support services. Life skills programme for children & adolescents.		MoE with assistance from MoHMS review and enhance Life Skills package. Train teachers, community leaders in child protection. Strengthen counselling capacity in schools.	Deliver life skills programme in communities in liaison with MoY. Target youth groups with advocacy and training: life skills and violence prevention. Train frontline police in child protection.

Unintentional injury	Evidence based actions	Graduated licensing. Mandatory helmet wearing (motorcycle and bicycle) Multi-component traffic control.	Trauma care including first responders (e.g. ambulances)		Police enforcement of traffic injury control.*
	Current actions and coverage (if known) in Fiji	Graduated licensing. Enforcement of road safety laws including speed and alcohol restrictions.			Expand police enforcement of traffic injury control: restriction on driving age/ experience for mini-bus.
	Recommendations	Curfews for probationary drivers. Restrictions on mini-bus licensing to inexperienced drivers. Enforce wearing of seat belts in cars.	Develop life skills messaging with focus on community, road, boat, water, and fire safety. Data by injury- intentional and non-intentional reported separately. Water safety campaign to reduce high incidence of drowning.	Targeted road safety campaign. Life skills programme to focus on safety in the community, home and schools.	Strengthen community safety education. Road and boat safety campaign. Swimming teaching campaign for primary aged children. Strengthen coordination with NGOs and community groups to deliver safety programmes and advocacy.
Mental health disorders and suicide	Evidence based actions	Restriction of access to means.	Practitioner training in depression recognition and treatment. Routine assessment of mental health, including self-harm and suicide risk. Gatekeeper training*		Promote adolescent health mental health literacy. *
	Current actions and coverage (if known) in Fiji		MH Gap training for health professionals (MoHMS with WHO) commenced 2015. Peer educators not currently trained in MH.		Counselling diploma to commence at University of South Pacific in 2017 (utilising Australian curriculum content that Empower Pacific counsellors trained in).

	Recommendations	Restriction of retail sale of agricultural pesticides e.g. Paraquat Enforcement of illicit substance legislation.	Mental health training for all cadres of health professionals- focus on anxiety, depression, stress, substance abuse. Strengthen mental health training: in under-graduate nursing and medical courses. Liaise with MoE to allow access for school health teams to visit secondary schools. Undertake community survey to enhance data on mental health. Strengthen capacity for assessment of mental health, including self-harm and suicide risk.	Standardised training in life skills, mental health first aid and counselling for school counsellors. Strengthen capacity for assessment of mental health, including self-harm and suicide risk.	Strengthen capacity for assessment of mental health, including self-harm and suicide risk. Develop CHW mental health module for increasing mental health awareness
Chronic physical disorders, including RHD, diabetes, disability, congenital disease	Evidence based actions		Promote self-management. * Promote transition to adult care*	School base health services*	Peer support initiatives*
	Current actions and coverage (if known) in Fiji		NCD strategy and actions largely target adults. National RHD programme expansion since 2014. Diabetes specialist clinics.	School health screening programme in primary schools. Focus is on screening for health issues not provision of health messaging.	RHD programme piloting secondary prevention activities in communities. Use of social media by MoH to reach adolescents. Parent/child support groups with disease focus. Diabetes camp. Liaison with community and NGO groups to support chronic disease patients e.g. Wow Kids- cancer support

	Recommendations		Transitional service for adolescents with chronic diseases. Strengthen capacity at primary level for diabetes, NCD and RHD programmes. Data and reporting requires strengthening and age segregation. Liaise with MoE to allow access for school health teams to visit secondary schools.	Provide school health visit services for RHD, diabetes etc.	
Alcohol and illicit substances	Evidence based actions	Limit alcohol sales to underage adolescents. Tax on alcohol. Drink driving legislation. Restrict illicit alcohol. Interventions in licensed premises.	Risk screening and motivation interviewing *	Alcohol free policies*	Promote parent-child communication and parenting skills* Mentoring* Target knowledge, attitudes and risk behaviours*
	Current actions and coverage (if known) in Fiji	Sale of alcohol limited to minors. Alcohol tax in place. Graduated drinking*	MH Gap training for health professionals (MoHMS with WHO) commenced 2015	Family Life skills programme delivered in schools.	Police community and juvenile unit deliver community youth sessions.
	Recommendations	Enforce legislation against sale to minors.	Peer educators trained in MH. Improve access to MH service for adolescents. Increase number of psychiatrists, psychologists, social workers, counsellor positions and skills.	Strengthen alcohol and drug messaging - teachers and students.	Enhance peer education programme to include alcohol and substance abuse. Utilise social media and youth groups to deliver drug and alcohol messaging.
Tobacco	Evidence based actions	Tobacco control including taxing, pricing and advertising control. Youth access restrictions.	Anti-tobacco campaigns. Routine screening and motivations interviewing to promote cessation*	Smoke free policies* Multi component*	Interventions to promote parent skills and parent-child communication*

		Legislation for smoke free air.			
	Current actions and coverage (if known) in Fiji	Evidence based actions in place	Wellness Unit delivers anti-tobacco messages. CHWs trained in Wellness module to reduce NCD risk.	Family Life skills programme delivered in schools	CHWs deliver anti-smoking messaging as part of Wellness module.
	Recommendations	Strengthen enforcement of tobacco legislation	Strengthen anti-tobacco campaign.	Enforce no smoking messaging in schools and tobacco policy - teachers and students.	Enhance peer education programme to include tobacco. Utilise social media and youth groups to deliver tobacco messaging.
Overweight and obesity	Evidence based actions	Taxation of high-sugar, high-salt and high fat foods. Front of pack nutrition labels* Restriction of fast food advertising*	Manage comorbidities of obesity.	Multi-component interventions, involving education about healthy diet and increasing opportunities for physical exercise*	Promote physical activity*
	Current actions and coverage (if known) in Fiji	? Salt and sugar taxed ? Restrictions on advertising	Fiji Nutrition Plan for Action. Healthy food choices advocacy campaign. Obesity project at FNU- research with Deakin Uni adolescent nutrition.	Sport is part of primary curriculum, declines though high school.	Youth groups and sporting clubs

	Recommendations	Restrictions on marketing of junk food. Limit sponsorship of sporting events to companies marketing junk foods and soft drinks.	Strengthen Health advocacy- low sugar, good food choices, low fat, and low salt. Nutrition surveys undertaken every 10 years. Liaison with MoE (school health policy) and NGOs e.g. save the Children and UNICEF- education, resources. Liaise with MoE to allow access for school health teams to visit secondary schools.	Ban of soft drinks from schools. Enforce canteen policy. Undertake M& E of school canteen adherence to policy. Develop PE teaching expertise. Enhance sporting opportunities and include in curriculum throughout high school.	Strengthen sporting opportunities in the community. Walking bus for school children. Restriction on junk food advertising. Enforce school canteen policy.