While most Pacific island countries and areas have shown a consistent increase in life expectancy over the past 20 years, others have shown little or no improvement. Improvements in immunization, child health and communicable disease control have contributed to improved health outcomes in the Pacific. At the same time, NCDs have emerged as a priority public health challenge and have reached crisis levels in many PICs. Many countries now face a double burden of disease. Other causes of death also contribute significantly to premature mortality, including injury and suicide.

Key drivers of NCDs in particular lie beyond the health sector. Sustainability is also a challenge as changing development partner priorities can put achievements at risk.

Future directions proposed include multisectoral actions and health-in-all-policies approaches to promote health through the life course. Legislative, regulatory and fiscal interventions can strengthen health systems to ensure healthier lifestyles for all. Integrated people-centred service delivery with emphasis on primary health care should address health needs in an equitable manner. A few indicators can be adapted from globally agreed targets and indicators to measure health outcomes in the Pacific.
1. BACKGROUND

The Yanuca Island Declaration called for healthy islands where people work and age with dignity. Most Pacific island countries and areas (PICs) have experienced gains in life expectancy over the past 20 years, but progress has stagnated recently. Many countries have low levels of infant mortality, while others struggle to consistently improve the survival of newborns.\(^1\) Reported maternal deaths have declined, but variations exist between and within countries. Other causes of death such as traffic injury and suicide contribute significantly to premature death in younger adults.

Many PICs are experiencing a double burden of communicable and noncommunicable diseases (NCDs). Successes in tackling communicable diseases have been uneven between and within countries. Social determinants of health including poverty, poor sanitation and water supply, unsafe practices and behaviours, and low education levels have not greatly improved as reflected in Millennium Development Goal (MDG) progress reports.\(^2\)

While tuberculosis (TB) prevalence and mortality has decreased, the disease disproportionally affects vulnerable populations, including people with co-morbidities, children, older people and people with low socioeconomic status. In 2013, five countries reported more than 100 TB cases per 100 000 people. Leprosy remains endemic in many countries with new cases occurring among children. This implies active transmission of the disease.

The combination of viable vectors, susceptible populations and other drivers of disease transmission has led to frequent outbreaks of dengue, Chikungunya and Zika virus infections. Resurgence of measles outbreaks in some PICs after staying measles free for several years shows the fragility of achievements and the continued risk if services are not maintained. PICs are also vulnerable to post-disaster disease outbreaks.

At the end of 2012 five PICs reported no people living with HIV (Cook Islands, Nauru, Niue, Pitcairn Islands and Tokelau). HIV prevalence was low – estimated at 0.1% among people aged 15–49 years – in 16 other PICs (excluding Papua New Guinea). However, in some PICs, the number of new cases reported is increasing despite low numbers of people being tested. Other sexually transmitted infections (STIs) consistently register high positivity rates.

NCDs risk factors – tobacco use, harmful use of alcohol, unhealthy diet, physical inactivity and obesity – have increased in most PICs. The Pacific has some of the highest rates of diabetes in the


world which, along with cardiovascular diseases, leads to significant premature mortality. Premature mortality has significant impacts on productivity, contributing to economic loss and poverty in families. In some parts of the Pacific 19 out of 20 men and nine out of 10 women have NCD risk factors. More than 90% of adults are overweight or obese and up to 40% of people have diabetes in some PICs.

Mental health in the Pacific is often not prioritized. Violence and injuries are also important causes of death and disability in the Pacific, particularly among the young and economically active age groups of 5–49 years. More than 1500 people were killed on Pacific roads in 2010. Prevalence of violence against women is also of particular concern in PICs.

The number of older people in the Pacific is projected to grow from around 376 000 to 2.2 million by 2050 with an impact on health-care costs and potential to contribute to the growing prevalence of NCDs. This will also lead to increases in disability prevalence. If limited access to rehabilitation and assistive service devices continues, people’s quality of life will be impacted.

The Pacific health ministers have addressed disease burdens over the years. Tuberculosis and lymphatic filariasis were targeted for control and elimination in 2001. Implementation of the International Health Regulations (IHR) (2005), and dengue and pandemic preparedness were agreed in 2005 and 2007 respectively. In 2013 the health ministers adopted the nine voluntary global targets for NCDs with an ambitious Tobacco Free Pacific goal by 2025. In 2014, the first joint meeting of health and finance ministers endorsed the NCD roadmap.

2. PROGRESS AND ACHIEVEMENTS

2.1 Communicable diseases

Control of communicable diseases has contributed remarkably to improved health in the Pacific. Through implementation of WHO’s global TB strategies, PICs have achieved a reduction in TB prevalence by one-third and TB mortality by two-thirds compared to 1990 levels.

Malaria morbidity and mortality have remarkably improved in the three endemic countries, though there is some evidence of a slowdown or reversal in one country. Emergence of artemisinin resistance remains a major threat to achievements.

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Morbidity and mortality due to vaccine-preventable diseases have been significantly controlled. The 21 PICs are likely to be verified as an epidemiologic block for the regional measles elimination goal by 2017. However, risks remain, as demonstrated by the resurgence of measles in Papua New Guinea and other countries since 2013. Most PICs are also likely to reach the regional hepatitis B control goal by 2017. Routine immunization coverage continues to improve in many PICs. All countries have remained polio free.

Access to diagnosis and treatment of HIV and STI was enhanced as the number of people living with HIV in need of antiretroviral therapy doubled. Presumptive treatment of chlamydia was effective in reducing prevalence in the two PICs that implemented this approach.

The Pacific Programme to Eliminate Lymphatic Filariasis (PacELF) is a remarkable success story. Mass drug administration (MDA) against lymphatic filariasis has reduced infection rates in all endemic countries. The benchmark of less than 1% prevalence has been reached by most countries. All PacELF countries are on track to achieve the elimination goal by 2020. School deworming programmes to control soil-transmitted helminth infections are in place in eight countries. Three of these countries have achieved the global target of deworming 75% of at-risk children.

The majority of PICs have eliminated leprosy as a public health problem with prevalence below 1 case per 10,000 people although there are continued needs to provide quality leprosy services for diagnosis, treatment and long-term care.

2.2 Noncommunicable diseases

Although NCDs continue to cause unacceptably high levels of morbidity and mortality across the Pacific, PICs have taken steps in tackling NCD risk factors. Thirteen countries have national comprehensive tobacco control legislation and nine have increased taxes on tobacco products in the past three years. Samoa and Tonga have observed a decline in tobacco use prevalence. Mandatory nutrition labels are required in six countries. Pacific salt reduction targets have been adopted in draft food regulations in four countries and voluntarily in one country.

Availability of a package of evidence-based and cost-effective interventions has helped to strengthen NCD management in the Pacific. Most PICs are adapting the package to national contexts. Two countries have rolled out the package nationally; five countries have costed the package.

Since the first STEPS survey for NCD risk factor surveillance in 2002, 17 countries have undertaken at least one STEPS survey among adults. Four PICs have completed the second round of national surveys. The Global Youth Tobacco Survey, Global School-based Student Health Survey and Youth Risk Behaviour Survey have been completed in 17, 10 and five countries respectively. Some routine national surveys have also been expanded to include questions about NCD risk factors.
Most countries have developed mental health policies and plans; 16 countries have finalized detailed mental health situation analysis; and seven countries have trained 250 health providers in mental health service provision. Some progress has been noted in access to rehabilitation and assistive devices for people with disabilities.

2.3 Health security

IHR (2005) core capacities have been strengthened in most PICs from 2012 to 2014. This includes strengthening national and regional surveillance and response systems. The Pacific Syndromic Surveillance System established in 2010 provides early warning surveillance for disease outbreaks in all PICs. Other activities of the Pacific Public Health Surveillance Network (PPHSN) include: outbreak detection through syndromic and event-based surveillance; regional alert and communication through the PacNet email list; verification and identification through the LabNet network; investigation and response; and infection control. At the most recent IHR (2005) meeting in 2014, PICs requested support from WHO, SPC and partners to implement formal event-based surveillance. The PPHSN Pacific Outbreak Manual was updated in 2014, and capacity-building through the Pacific Data for Decision-Making (DDM) programme was reinvigorated in 2012. The DDM programme was endorsed by Pacific heads of health, and is being implemented across the Pacific as part of the Strengthening Health Interventions in the Pacific (SHIP) programme. These programmes focus on communicable and NCD epidemiology and surveillance.

3. ISSUES

3.1 Actions beyond the ministries of health

Rapid unplanned urbanization, trade liberalization and other economic activities affect food, tobacco and alcohol supply. This impacts behavioural risk factors for disease. The need for multisectoral action is indicated in limited achievements in water and sanitation in some PICs, challenges in enforcement of legislation for tobacco control, road safety and restricting access to unhealthy foods and beverages, and vulnerability to disease outbreaks.

Ministries of health can present the evidence and advocate action, but policies for many social determinants are not within their purview. Efforts of ministries of health may be outweighed by

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economic or other interests. Low levels of engagement by civil society organizations can further reduce the effectiveness of interventions.

3.2 Fragmentation of health service delivery and public health programmes

Vertical programmes can often deliver results in fragile health system contexts. Many of the achievements reported above are a result of vertical efforts. However, vertical programmes often rely on unsustainable external funding. Transition from individual vertical programmes to integrated health service delivery is important, but must be carefully planned and adequately resourced to ensure gains are maintained.

Ministries of health have a limited workforce and need to manage multiple public health initiatives. This can lead to inefficiencies and high opportunity costs. Aid dependency and changing development partner priorities can weaken the systems at the expense of one priority. Common elements in related programmes can be strengthened for efficient delivery of services.

In addition to epidemic-prone disease outbreaks in the Pacific, public health systems and communities also need to prepare to respond to unusual/unexpected events. These include human infections with avian influenza and pandemic influenza viruses, Middle East respiratory syndrome and Ebola virus disease as well as natural hazards such as floods, cyclones, droughts and tsunamis. Specific IHR (2005) priority areas to strengthen preparedness include: (1) early warning surveillance capacity; (2) rapid response capacity; (3) workforce capacity, specifically field epidemiology expertise; and (4) IHR (2005) core capacities at international points of entry.

3.3 Service delivery not meeting population needs equitably

Health outcomes and service use vary among social, economic and geographic population groups. Limitations in quality assurance systems – including regulation, accreditation and patient empowerment – affect the safety and effectiveness of health services.

Lack of personnel, equipment and drugs with poor service delineation have resulted in unmet needs in catchment populations. Adequate coverage of services is critical to achieve positive health outcomes. In many PICs, outer islands populations rely on under-equipped nursing stations for health care. The price and availability of medicines vary widely in PICs with an impact on treatment coverage. Uneven distribution of health professionals and out-of-region migration of highly trained specialists is a critical bottleneck. Private health-care providers play a limited role in the Pacific but represent a growing market in need of regulation.
3.4  Multiple surveys but not enough timely information

Health information is fragmented, of uncertain quality and often delayed. Although significant improvements have occurred, the coverage and quality of death registration and mortality certification remain limited in many PICs. In other PICs, data is available but not routinely reported. While PICs have improved civil registration and vital statistics (CRVS) through the Pacific Vital Statistics Action Plan (PVSAP) and Brisbane Accord Group (BAG), more work is needed.

Multiple data collection programmes based on resource availability, lack of coordination within different departments and development partner needs have led to fragmented health information. Geographic challenges result in a paucity of timely, reliable information for programme managers and policy-makers. Recent measles outbreaks are a stark reminder of the need for quality surveillance and accurate measurement and monitoring of immunization coverage. There are also constraints in using data to improve programme delivery. Human resource capacity is often limited and adds to the challenges.

4.  FUTURE DIRECTIONS

4.1  Governments may consider:

(1)  Fostering and leading multisectoral action and health-in-all policies approaches.

   • Identify "win-win" actions such as: increasing tobacco taxation which helps to reduce demand for tobacco and generates revenue; and poverty reduction, planned urbanization and addressing socioeconomic inequities which can lead to benefits in health, social and environmental sectors.

   •  Ensure that gender, equity, and human rights are considered in all policy development, resource allocation and programming.

   •  Consider appropriate national mechanisms to achieve health in all policies. Priority actions listed in regional health action plans and the NCD roadmap can guide multisectoral action, especially for non-health ministries.

   •  Prioritize and protect access to affordable essential medicines from the possible risks of trade and investment agreements.

(2)  Expanding health promotion and protection beyond health education.

   •  Build healthy public policy through approaches including legislation, fiscal measures, taxation and organizational changes.
- Reorient health services to move beyond provision of clinical and curative services. For example, ensure health professional education involves developing skills in health promotion.
- Prepare to respond to disease outbreaks and to manage the ongoing risk of epidemic-prone diseases through robust all-hazards preparedness plans and disease-specific strategies, including at the health-facility level.
- Create supportive environments that make healthy choices easier. This includes safe, stimulating, satisfying and enjoyable living and working conditions in schools, work places, towns and communities.
- Strengthen opportunities for community participation and contributions to health, and improve access to information.

(3) Developing integrated, people-centred health service delivery.

- Define a service delivery package for the primary health care level to meet population needs, and ensure adequate facilities and well-trained staff.
- Address workforce issues (health worker numbers, distribution, skillsets including IHR (2005) core capacities and institutional support systems) to fully implement all health programmes.
- Sustain referral facilities as part of integrated care to treat critical patients. Funding is crucial and ultimately should become part of national budgets.
- Involve communities in managing health facilities. Health staff reaching out to communities through low cost actions such as immunization and preventive chemotherapy against neglected tropical diseases has been popular and benefited communities.

(4) Ensuring reliable and timely data on key health indicators.

- Ensure the sustainability of data collection and reporting by an integrated health information system that can efficiently provide good quality information for action – whether that action is promptly controlling a measles outbreak, achieving reductions in NCD risk factor prevalence, increasing use of health services by survivors of interpersonal violence, measuring health system performance or addressing health inequalities.
• Implement actions and commitments agreed under the regional action framework for CRVS.\(^6\) Death registration and cause-specific mortality certification are critical for all health and development programmes and must be available in a timely manner. This requires collaboration across departments, and as such must be prioritized at the national level.

• Ensure PICs are prepared for emerging disease threats by strengthening national and regional health security preparedness based on IHR (2005) implementation. This includes strengthening cross-border information sharing and coordination.

• Strengthen the quality of surveillance for vaccine-preventable diseases.

• Agree on a core set of indicators from globally agreed targets and indicators, and ensure that there are adequate resources to regularly measure and report on progress.

• Ensure all data collection and reporting includes gender and socioeconomic stratification.

• Better coordination of data collection can minimize demands on countries and improve efficiency. This could be at national and regional levels through alliances such as Pacific Monitoring Alliance for NCD Action (MANA) for reporting on the NCD roadmap and the PVSAP.

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