

報告

## 理学療法士として活動した JICA ボランティアの活動 in Fiji

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独立行政法人国際協力機構 (JICA) が実施する JICA ボランティア事業の JICA 海外協力隊として、2018 年 10 月からフィジーへ派遣され、そこで理学療法士として活動を行なった。フィジーは非感染性疾患 (NCD) の発生率が世界で最も高い国の 1 つであるとされており、フィジーにおける全死亡者数の内、実に 80% 以上を NCD が占めている。フィジーの西部地区に位置している NGO, Foundation for Rural Integrated Enterprises & Development (FRIEND) の周辺地域には、様々な事情で適切な医療サービスを受けることができない村落が多く存在している。FRIEND は、医療サービスが届いていない村人に対して医療サービスを提供するなどして、地域医療に貢献している。本稿では、フィジーでの任期中に実施した、1) クリニックでの診療、2) 村への訪問、3) 福祉用具の寄付と定期的なサポート、4) 現地大学生や地域住民に対する運動指導の講義、5) フィジーで作成した成果物、の 5 つの NCD 対策に関する活動について報告した。

キーワード : Japan International Cooperation Agency, 非感染性疾患, 国際協力, フィジー, 理学療法

### The work of a Japan International Cooperation Agency volunteer as a physiotherapist in Fiji

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In October 2018, I was dispatched to Fiji as a Japan Overseas Cooperation Volunteer under the Japan International Cooperation Agency (JICA) volunteer program, where I worked as a physiotherapist. Fiji has one of the highest incidences of non-communicable diseases (NCDs) globally, accounting for over 80% of all deaths in Fiji. Many villages in the western region of Fiji, including the area I was dispatched to, seldom receive appropriate medical services owing to various circumstances such as a lack transportation to get to the hospitals and poor quality of medical care provided in the village. I was assigned to the Foundation for Rural Integrated Enterprises & Development (FRIEND), an institution that aims to provide medical services to the village residents of the western region. This report details the following five activities related to NCDs that I was part of during my term in Fiji: 1) medical treatment at the clinic, 2) visits to villages, 3) donation of welfare equipment and provision of continuous support, 4) exercise instructions for local university students and residents, and 5) development of exercise-related activities and products in Fiji.

Key words : Japan International Cooperation Agency, non-communicable diseases, international cooperation, Fiji, physiotherapy

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## I . Introduction

The Japan International Cooperation Agency (JICA) volunteer program is a cooperation scheme implemented by the JICA as part of Official Development Assistance (ODA) by the Japanese government. In October 2018, I was dispatched to Fiji as a JICA volunteer to work as a physiotherapist. This article illustrates the activities that I was involved in during my participation in the program.

## II . Medical conditions in Fiji

Non-communicable diseases (NCDs) are the leading causes of mortality worldwide<sup>1)</sup>. The World Health Organization (WHO) includes four major diseases—cardiovascular disease, diabetes mellitus, chronic respiratory disease, and cancer—under the umbrella of NCDs<sup>1)</sup>. NCDs are predominantly attributed to the following four lifestyle-related problems: smoking, eating non-nutritious or unhealthy foods, lack of exercise, and excessive drinking. They are also related to the following four metabolic or biochemical modifications: obesity, hypertension, hyperglycemia, and hypercholesterolemia<sup>2)</sup>. Fiji has one of the highest incidences of NCDs globally, accounting for over 80% of all deaths in Fiji<sup>2)</sup>. Recent studies have reported that smoking has little effect on the risk factors for NCDs in Fiji<sup>3)</sup>. However, excessive salt intake<sup>4)</sup> and lack of exercise<sup>1) 2) 5)</sup> are the major risk factors for NCDs in the region.

## III . Activities in Fiji

I was assigned to a non-government organization called The Foundation for Rural Integrated Enterprises & Development (FRIEND) and dispatched to the western region of Fiji. The FRIEND aims to address local health issues from a medical and agricultural perspective. Many patients living in the villages around the area I was dispatched to seldom receive appropriate medical services for various reasons, such as a lack transportation to get to the hospitals and poor quality of medical services. The FRIEND is composed of three divisions—agriculture, finance, and medical. I worked as a member of the medical department, which aims to provide medical services to villagers with diseases who need medical attention (Figure 1). My tasks included the following: 1) treating patients visiting the clinic, 2) advising on the creation of a rehabilitation model for the target village and improving



Figure 1 Medical team at the Foundation for Rural Integrated Enterprises & Development (from left: PT Chole, Mr. Jonetani, PT Mereseini, PT Author, Dr. Margaret)

the overall environment, and (3) promoting NCDs prevention and healthy behaviors among residents from the viewpoint of disease control. My key activities during the assignment are illustrated in the following sections.

### III- 1 . Medical treatment in the clinic

The FRIEND has its own clinic. Patients who visit the clinic consult a doctor after routine a physical examination, which includes measuring blood pressure, body temperature, and blood glucose level. If the doctor determines that the patient requires physiotherapy, then a physiotherapist intervenes for evaluation and treatment. Patients who visited the clinic were mostly those who had difficulties in accessing treatment in the village and those who complained of symptoms such as low back pain, neck pain, and shoulder pain. When I started working in Fiji, the clinic at the FRIEND was open twice a week for treatment. However, since we started visiting patients with NCDs living in the community, we treated patients in villages more frequently than in the clinic. Therefore, patients who wanted to visit the clinic were requested to take book an appointment beforehand. Consecutively, the number of patients visiting the clinic reduced, and we decided to focus on activities in villages to develop lifestyle-related interventions. To do this, it was best to visit people in the village setting.

### III- 2 . Visit to villages

The healthcare system in Fiji comprise public and private hospitals. Foreigners and wealthy Fijians usually visit the private hospital. At the public hospital, treatment



Figure 2 Visit to a village

fees for patients are waived. However, shortage of medical staff tends to prolong the waiting times. Despite this, patient influx has been relatively high. In addition, a lack of resources, such as medicines, hinder patients from receiving proper medical assistance. Many village residents cannot afford to visit a private hospital, and access to public hospitals is very poor. Furthermore, hypertension and diabetes mellitus are “silent” diseases that progress gradually. Currently, the healthcare system of Fiji does not have provision for services, such as annual medical checkups, to prevent NCDs, contributing to low health awareness among the public. Hence, it is not only challenging to identify patients with NCDs but also difficult to continue treatment at the hospital for patients diagnosed with NCDs. However, during routine village visits, it is possible to identify patients who cannot visit the hospital at an early stage and contribute to delaying the progress of the disease as much as possible. We conducted a survey of over 200 people using parameters such as height, weight, blood pressure, blood sugar level, and lifestyle habits. This survey included village residents (Figure 2). Two-hundred and nine subjects were categorized into the following groups: A) group requiring immediate treatment (60 subjects), B) NCDs preparatory group (54 subjects), C) group requiring no treatment but requiring follow-up (71 subjects), and D) healthy group (24 subjects). NCDs-related subjects other than those in the healthy group accounted for 89% of the total number of subjects surveyed. We defined Group A, which had 60 subjects, as a group that frequently needed treatment and follow-up. Strictly speaking, more than 60 subjects were in need of medical assistance. However, we anticipated issues that are common in developing countries, such as the inability to provide ongoing support. This would have been a concern if the number of patients that had to be visited

increased. Therefore, 60 subjects were deemed eligible for the provision of medical assistance by the medical team on a regular basis. We also flexibly decided how frequently we would visit the 60 subjects that were selected. For example, patients with family support and stable illnesses may be visited once a month, and patients with no family support and difficult treatment regimens may be visited once a week. During each visit, the blood glucose level, blood pressure, and weight of the patient were measured, and exercise support was provided to patients in need of exercise therapy.

### III-3. Donation of welfare equipment and provision of continuous support

During a visit to a village, some patients may be advised to use assistive devices. Budget allocations to provide medical assistance to patients were achieved through financial cooperation with Australia Aid. Welfare equipment, such as crutches, T-canes, and wheelchairs,



Figure 3 Donation of welfare equipment and practice of its use

were donated to patients in need (Figure 3). In addition to distributing equipment, we also provided support to ensure their proper utilization.

### III- 4 . Lecture on exercise instruction for local university students and residents

We provided exercise training plans to students who attended healthcare and welfare courses at the University of the South Pacific Lautoka campus in Fiji and to healthcare workers residing in villages; we also provided guidance on effective assistance methods, such as getting up from a chair or bed, and worked hard to improve the overall health of the village residents. The aim was to increase the number of people who can exercise and provide assistance to them; this would in turn help in reducing the number of visits to the village. The presence of students and care workers was deemed encouraging and improved the efficiency of village visits.

### III- 5 . Products: Pacific dance movies, textbooks, exercise instruction flyers

I authored “exercise instruction manuals” that described exercises according to the patient’s ability for patients with NCDs (Figure 4) and “textbooks” that contained information about NCDs, such as Fiji’s statistical information about NCDs as surveyed by the WHO and risk factors related to NCDs, for university students who attended care and welfare courses (Figure 5). The medical staff and local residents provided assistance by volunteering as models for the booklet photos. Furthermore, design patterns that are often used in Fiji were used to ensure familiarity among the local residents. In addition to the activities at the FRIEND, my counterpart and I participated in regional workshops organized by the JICA in Fiji (February 2019) and Tonga (August 2019) for JOCVs working in the NCDs field and their counterparts in the Pacific countries (Figure 6). The burden of NCDs in each country was discussed, and a Pacific dance movie that incorporated the characteristic movements of each country was created in collaboration with the participating JOCVs. After the workshop in Tonga, the Pacific dance movie was introduced not only to the people living in villages but also to the staff at the FRIEND.

## IV. Conclusion

As a JOCV in Fiji, I was able to gain a lot of valuable

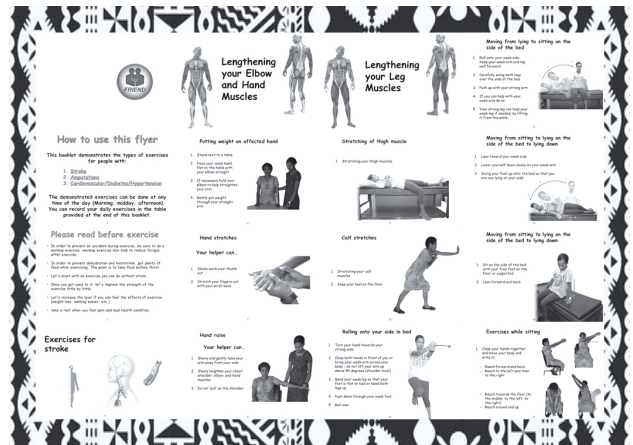


Figure 4 Examples of content from the exercise instruction manuals for patients with NCDs

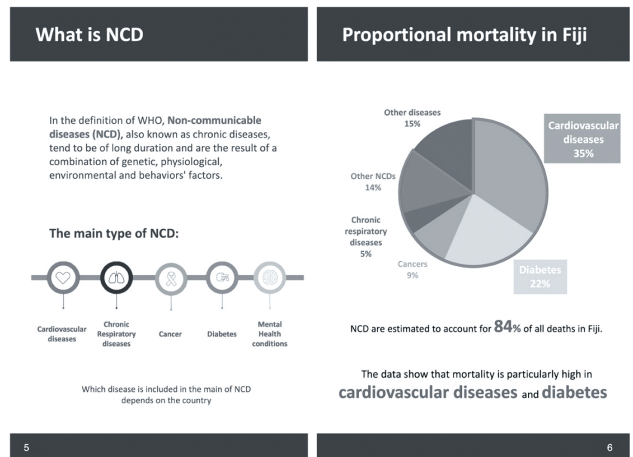


Figure 5 Examples of content from the textbooks for students who attended care and welfare courses at the University of the South Pacific Lautoka campus in Fiji



Figure 6 Team Fiji at the second regional seminar on non-communicable diseases by the Japan International Cooperation Agency

experience. I also realized that I needed to gain more in-depth knowledge about Japan. I would like to take back the valuable experiences that I gained in Fiji to Japan in the future and involve myself in the development of Fiji, which I now consider my second home.

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I would like to express my heartfelt gratitude to all the JICA Japanese staff members, national staff members in Fiji, and all the staff members and colleagues at the FRIEND.

## VI. Conflicts of interest

The authors have no conflicts of interest directly relevant to the content of this article.

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