

Current Research on the Promotion and Prevention of Non-communicable Diseases in Fiji

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Abstract—As indicated by the World Health Organization, an expected 80% or more deaths in Pacific island nations, including Fiji, were identified with non-communicable diseases (NCDs). This paper reports the results of a survey conducted with the health care workers working under Ministry of Health and Medical Services (MHOMS) as how ethical decisions can help in the promotion and advancement of one's health and wellbeing as well as prevent NCDs in Fiji. This study indicates that although mediation by health care workers is necessary to promote individuals' wellbeing and generate advantages for the population served, the nation as a whole when offered such intercessions should sufficiently comprehend the advantages and disadvantages for themselves and practice healthy living. As said by the American specialist and intellectual Edmund Pellegrino 'The wellbeing strategy of a country or a local community is its framework for controlling and improving the social employment of its clinical data and resources'. The study finding determined that health care workers proficiently proactively make an honest effort to advocate and advance the counteraction of NCDs in Fiji in spite of the absence of finances and assets apportioned by the health policy makers and government.

Keywords—non-communicable diseases; Fiji; public health; promotion

I. INTRODUCTION

As per the World Health Organization (WHO) non-communicable diseases (NCDs) are one of the primary source of death worldwide, alluded to as a "lifestyle" disease, on the grounds that most of these conditions are preventable ailments, the most well known cause for non-communicable diseases (NCD) incorporate tobacco use (smoking), perilous liquor use, poor eating routines (maximum usage of sugar, salt, immersed fats, and trans unsaturated fats) and actual latency or lack of physical activity [1-3].

Non-Communicable Diseases (NCDs) are as of now by a wide margin the main source of preventable death across the Pacific Islands including Fiji. International leaders perceived the reality of the danger that NCD stances to individuals in Pacific Island nations, particularly Fiji and the earnestness to address its lead to the declaration that the 'Pacific is in an

NCD Crisis' (Secretariat of the Pacific Community, 2011). There are four primary kinds of NCDs; cardiovascular disease (Heart diseases, for example, heart attacks and stroke), respiratory diseases (Lung infection like Asthma and COPD), cancers and diabetes. Therefore, this study examines the progressive enthusiasm for health promotion by health care workers in response to the crisis of NCDs when prevention is better than cure.

Verifiably, numerous NCDs were related with commercial expansion and were alleged a "disease of the rich". The affliction of non-communicable diseases on economically developing nations has expanded be that as it may, with an approximate 80% of the four major types of NCDs — cardiovascular diseases, malignancies, chronic respiratory infections and diabetes — presently happening in low-and middle income nations [4-6].

Similarly, Fiji being an economically developing country, it has probably the most elevated figure of NCDs on the planet where it represents over 80% of all deaths, of which most are untimely. The four major types of NCDs comprises of cardiovascular diseases (CVD), diabetes mellitus (DM), chronic respiratory diseases (CRD) and cancers (CAN) showcasing large number of the population suffering with cardiovascular illnesses like coronary diseases and stroke affecting majority of Fijians [7,8]. In 2018, Fiji recorded the most noteworthy death rate from diabetes contrasted with some other country with 188 fatalities per 100,000 people.

Moreover in Fiji, medical care services have restricted monetary and human resources henceforth the expenditure of overseeing NCDs constraints government accounts. Health care workers regularly deal with different medical conditions, including maternal and infant wellbeing, along with NCDs [9]. Intervention by health care workers in promoting and advocating measures against NCDs have been accomplished mainly through creating treatment techniques, accepting that clinics and hospitals will provide further training in improving the health care workers treatment and nursing abilities.

Furthermore, majority of the Fijian population who are at the beginning phase of NCDs or those at a high risk of having

NCDs, are individuals who are obese, are found within communities, not simply in hospitals. Subsequently, the local residents themselves should advance and promote primary and secondary NCD prevention, and receiving support from health care workers is also crucial. Under the domain of Fiji's Ministry of Health and Medical Services (MOHMS), NCDs' control and prevention have been centered on local community endeavors, with expanded emphasis on prevention. In this way, it is imperative to develop the health care workers capacity to provide assistance for NCD prevention and control, as well as emphasizing prevention through community health activities.

II. METHOD

This cross-sectional study was conducted on health care workers between the ages of 30-40 who actively worked in the NCD prevention and control department. Study sample size was 200 health care workers and sampling method was random sampling to ensure that there was no sex bias. Information was gathered using a standardized paper-and-pen questionnaire survey. Data was analyzed for mean and standard deviation. The level of statistical significance was set as $P < 0.05$.

A. Samples

This survey was a cross sectional analytical study directed under the Ministry of Health and Medical Services (MOHMS). Study population included 200 health care workers in the Ministry of health who were assigned to manage NCD prevention and control in clinics, hospitals and nursing homes in mainland Fiji. Sampling method in this study was random sampling. The sample size was 200 health care workers. The health care workers were chosen randomly from various facilities and those who were willing to participate in the study were included in the study, the study sample had 50% female and 50% males to prevent sex predisposition.

B. Inclusion and Exclusion Criteria

Inclusion criteria were 200 health care workers, between the age of 30 and 40 years old who were willing to participate in the survey, they signed an educated assent in order for them to participate in the study. Exclusion criteria were reluctance of few health care workers to participate in the study as well as incomplete or incorrect completion of study questionnaires.

C. Ethical Considerations

Informed consent was obtained from the health care workers and their willingness to participate was also additionally considered for incorporation of samples in this study.

D. Data Collection

This study was conducted after obtaining permission from the Ministry of Health and Medical Services (MOHMS) in Fiji, from March to April 2021, as well as written informed consent was acquired from every one of the members. Public health nurses disseminated an unknown, printed version poll in an envelope to the members. The questionnaires were either gathered by the nurses or sent back straightforwardly to

MOHMS. The survey included 10 inquiries question covering various subjects, like competency in research, evaluation, checking, direction, and training; intercession the executives, social elements, ethnic foundation (iTaukei, Fiji Indian, Rotuman's or other), and religion (Christian, Hindu, Muslim, or others) and local area improvement limit. The dependability and legitimacy of this questionnaire has been assessed by the Ministry of Health and Medical Services and was discovered to be legitimate and considerable.

E. Statistical Analysis

Information were encoded utilizing the Microsoft Excel statistics formula programming. The confidence limit was set as 95%.

III. RESULTS

The response rate was 100% in this study. The mean age of the health care workers was 35 ± 1.24 (maximum age was 40 and minimum age was 30). A total of 100 males and 100 were female's health workers participated in the study. The first question was "Ethics acts as the bridge between health policy and value, as a health care provider do you feel a sense of responsibility in health promotion and disease prevention" to which all the participants (200) replied yes. The second question enquired if the health care workers clearly understood the purpose, importance and current status of one's own work to which they again answered yes. When asked about the average life expectancy of Fijian people 85% (170) selected yes to the age group of 65-75 years old, whereas 15% (30) of the workers selected no as an answer. Majority of the participants 90% (180) agreed that NCDs are the main source of death in Fiji and the most common conditions they witness at local clinics and hospitals are cardiovascular heart diseases and diabetes to which 80% (160) agreed and 20% (40) disagreed respectively. Other questions included if collection of information data on increasingly health problems are being appropriately gathered and utilized where 73% (146) agreed, also 82% (164) participants agreed that the health policies and programs assembled are based on the needs of the local residents, and again 88% (176) said yes to health care workers and local residents collaborating for the implantation of programs and activities designed by the government. When asked if the government is allocating resources towards organizing campaigns and creating awareness in local communities participants responded with a 85% (170) positive feedback.

In addition, question number 10 stated as health care providers, how can you and the government aid in dealing with the rise of health issues in Fiji especially NCDs, the purpose of this open end statement was to gather information and individual perspectives of the participants since this survey was conducted through the means of paper questionnaire and not through an interview. All the responses were carefully analyzed by the author and placed into four categories; 70% (140) of the participants mentioned adequate allocation of resources and finances are necessary, they stated when provided with better training facilities and resources health care workers can upgrade and enhance their knowledge and skills to aid the people of Fiji. 85% (170) of the health care

workers raised concerns on social and environmental factors hindering health promotion and disease prevention. Several past NCD surveys conducted in Fiji showcased females are altogether more obese than males, native Fijians are more obese than Indo-Fijians and urban children are more overweight than rural children. This is because of globalization, urbanization, and assimilation establishing an environment that advances undesirable dietary admission and inactive examples. Moving on, 60% (120) noted down the need to improvise and implement laws and regulations in respect to prevention of NCDs lastly 45% of the health care providers mentioned if medical incentives are put out for the public it can prompt the promotion of healthy living in Fiji.

The results were calculated for mean, standard deviation and P-value (See Table I), Figure 1 and Figure 2 are the analysis of questionnaires respectively. Out of 200 health care workers 50% were males and 50% were females to limit sexual orientation bias. With this size population, there is a 95% chance that the real value is within $\pm 4.89\%$ of the surveyed value using the margin of error calculation. The age of most of the surveyed health workers was 35 ± 1.24 ($\pm 7.75\%$). The mean of the population was 100 and the standard deviation varied for the 15 questions (See Table I). Overall the survey found that the healthcare workers were already well informed and equipped as the results of the questionnaire was 90% similar to one another despite the individuals answering them privately.

TABLE I. ANALYSIS OF QUESTIONNAIRE

Question	Yes	No	Mean	Standard Dev	P Value
1	200	0	100	141.42	0.49
2	200	0	100	141.42	0.49
3	170	30	100	98.99	0.32
4	180	20	100	113.13	0.38
5	160	40	100	84.85	0.25
6	146	54	100	65.02	*0.13
7	164	36	100	90.50	0.28
8	176	24	100	107.48	0.36
9	170	30	100	98.99	0.32
10	-	-	-	-	-

Chi-square test * Not significant at $p < 0.05$.

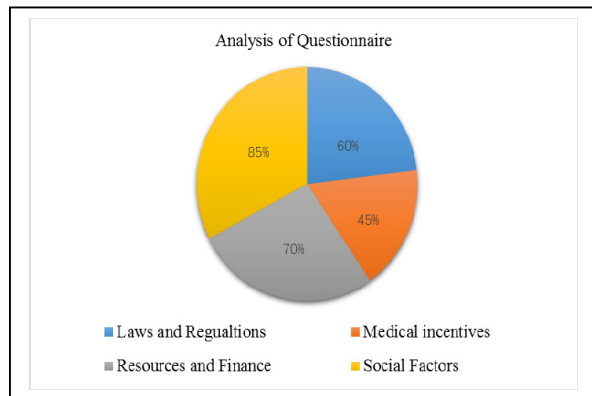


Figure 1. Analysis of uestionnaire.

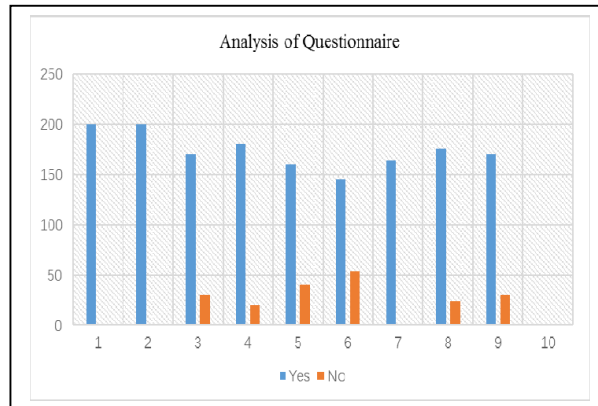


Figure 2. Analysis of question number 10.

IV. DISCUSSION

It is so important to be aware of the role ethics plays in the practice of medicine particularly with regards to health promotion and prevention. The purpose of this paper is to gain a greater understanding of why the promotion and prevention of non-communicable diseases (NCDs) in Fiji is so limited, what factors and ethical issues bound the endeavors of health care workers and providers leading to such alarming numbers of premature death in the country. This study also reveals the difficulties health care workers face in making decisions about the health and welfare of their patients and how influencing factors such as social norms such as religion, age, sex, environment, availability of adequate resources and finances and others hinders the wellness of the nation. Furthermore, this study shed light on the role of individuals and the government to promote the eradication of non-communicable diseases (NCDs) in Fiji and how the health care workers portrayed a strong sense of understanding and responsibility when it came to supporting the local residents and the government in their efforts of health promotion and disease prevention.

V. CONCLUSIONS

Subsequently, different public, social and religious practices yield diverse ethical frameworks, and their communication with health policymakers will thusly vary from one country to another. Three general contemplations ought to propel wellbeing strategies: First, to endeavor to control the social and financial effect of the excessive utilization of cutting edge clinical innovation in treating single patients; second, to accomplish a more evenhanded circulation of the advantages of clinical information; and third, to utilize the clinical information in an expectant manner for the aggregate great of present and people in the future generations.

In defiance of receiving interventions from numerous international and topical allegiance and strategies progress in the counteraction and management of NCDs in Fiji is insufficient Stressing health systems and budgets and redirecting scarce resources away from health care workers hindering their contribution in better promotion of health. Hindrances associated with cooperation among health and non-health sectors within the government and general public

are regularly seen as the underlying issue. For example, businesses were needed to work together with the Ministry of Health and Medical Services and the Ministry of Finance, Public Enterprises, Public Service and Communications in the execution of a sugar-improved refreshment charge strategy, however they considered it to be an upsetting errand in light of the fact that their incomes depended on utilization so debilitating it counteracts their inclinations.

Therefore the Fijian health care workers and government ought to perceive that Fijians generally regard a large body size as alluring and an pointer of not only wealth, but also of being regarded for and respected in the society. Culturally determining timeframes may impact the extent to which Fijians view the future; averting non communicable diseases (NCDs) may be less effective if it requires activities that could be instrumental in future outcomes while “typical Fijian” timeframes are more limited. This makes it significant for health care workers and the government to understand how sociocultural elements impact eating, activity, and body size and overall health in Fiji.

With respect to the general public they themselves can prevent non communicable disease (NCDs) related premature and untimely deaths by reforming way of living. A clean eating routine, partaking in proactive tasks just as staying away from the utilization of liquor and tobacco are best cures that people can work on to keep away from the danger of NCDs. While at in schools and at work mandatory recreation movement ought to be profoundly empowered amid children and adults in order to promote wellness and health.

Likewise, the public authority ought to broadly subsidize the NCD precaution plan rather than simply in NCD remedial territories. The NCD protection procedure should zero in on giving instruction on way of lifestyle conditions, implement appropriation on good food varieties and duty the unsafe food varieties, tobacco and liquor. These drives are essential on families and government's part to decrease the danger of contracting NCDs and its negative ramifications on the economy. Organizations ought to keep a specific prerequisite of sound living and commitment in actual work among the representatives since it increment business consumption for representative medical care and inclusion at the firm level. Although it requires some speculation, over the long haul healthy and capable professionals will improve the degree of yield and profitability. All these will help develop the capacity and ability of health care professionals to promote healthy living and advocate prevention of non-communicable diseases (NCDs) in Fiji.

LIMITATIONS OF THE STUDY

Random sampling results can be biased as there are no set parameters for the ages of the students only that they are between 30-40 years of age but not the amount of each age group, also the workplace (health centers, community clinics, hospitals) and regions vary. The health care workers were all anonymous and encouraged to answer truthfully, but there is no way to prove if they did.

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