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Research Article

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An Exploration into the Capacity Building Initiatives for the Clinical Nurses in Solomon Islands

Leila Ross*

Coordinator Bachelor in Midwifery, School of Nursing & Allied Health Sciences, Solomon Islands National University, Solomon Islands

*Corresponding author: Leila Ross, Coordinator Bachelor in Midwifery, School of Nursing & Allied Health Sciences, Solomon Islands National University, Solomon Islands.

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Abstract

This study aims to gain an understanding of the challenges regarding the existing capacity building initiatives of the clinical nurses in Solomon Islands. Research has shown that adequate nursing capacities improve patient health outcomes. However, little is known about the challenges regarding the capacity development of the clinical nurses for effective service delivery in Solomon Islands. Hence, recognizing the challenges is significant to the development of strategies required to reinforce their existing capacities within the health care service.

A qualitative research design with in-depth individual interview of 10 (Key persons) clinical nurses from various health care facilities in Honiara participated in the study in 2015. Data was obtained through semi-structured open ended individual interview. All the interviews were audio recorded then were transcribed verbatim. Thematic analysis was used to identify themes relevant to this study. Four themes emerged from the study were: Professional Development Initiatives, Lack of motivation, Manpower deficit and Insufficient funding. The findings of this study highlighted some of the challenges the clinical nurses encountered regarding the development of their capacities for effective service delivery. Hence, interventions by the responsible ministry, the government and its important stakeholders aiming at reinforcing nursing capacities in the Solomon Islands need to consider these challenges. Further studies are needed to explore the capacities of clinical nurses specifically in the different levels of the health care services and to explore specific capacities as highlighted in the study.

Keywords: Capacity building; Human resources; Physical resources; Clinical nurses; Qualitative research; Nursing workforce

Abbreviations: ACR-Annual Confidential Report; AHC-Area Health Center; CD-Communicable Disease; CN-Clinical Nurse; CNC-Clinical Nurse Consultant (Charge Nurse); CPD-Continuing Professional Development; IMCI-Integrated Management of Childhood Illnesses; IUCD-Intra-Uterine Contraceptive Device; KMU-Kaohsiung Medical University; MHMS-Ministry of Health & Medical Services; NAP-Nurse Aid Post; NCD-Non-Communicable Disease; NHP-National Health Plan; NHREC-National Health Research & Ethical Committee; NRH-National Referral Hospital; PDP-Professional Development Program; QOF-Quality & Outcome Framework; RHC-Rural Health Clinic; SI-Solomon Islands; SIG-Solomon Islands Government; SIMS-Solomon Islands Meteorological Service; UCSF-University of California, San Francisco; UNDP-United Nations Development Program; WHO-World Health Organization

Chapter 1: Introduction

This chapter outlines a brief background on the Demographics and health situation of Solomon Islands (SI). The information includes the geography, political structure, population, climate, economy, epidemiological information, the existing health care service delivery model, the gap, and the aim of the study.

Geography and Sociodemography of SI

Solomon Island is a diverse country that comprise of more than 900 mountainous Islands and low-lying coral atolls with a total land area of 28,896 sq km. The country is situated northeast of Australia in the South Pacific Ocean. Papua New Guinea is a nearest neighbor



to the west and Vanuatu to the south-east. There are 10 provinces in the Solomon including the capital territory of Honiara, Western,

Choiseul, Isabel, Central, Guadalcanal, Malaita, Makira and Ulawa, Renell and Bellona and Temotu Provinces (Figure 1).

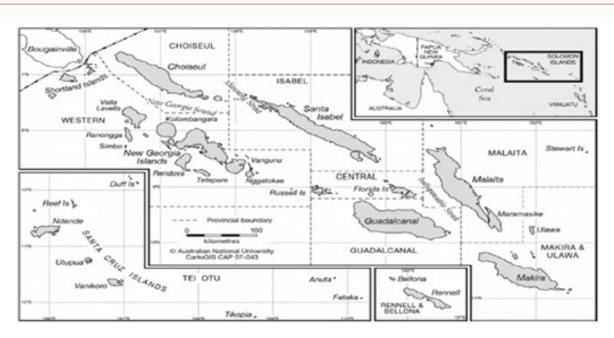


Figure 1: Shows the political map of Solomon Islands indicating 9 of the 10 provincial boundaries as well as its proximity to the neighboring countries as Papua New Guinea, Vanuatu and Australia. (http://asiapacific.anu.edu.au/mapsonline/base-maps/solomon-islands).

The total population of Solomon Islands at the time of National Census in 2009 was 515,870 with an estimated growth rate of 2.3% per annum. The projected population for 2015 was 568,013, a net increase of 52,143 (total period increase of 10.1%). The country's population remains one of the youngest in the region with 41% 0-14 years. The median age in 2009 was 19.8 years, with 54% of the population aged 15-59 years and only 5 % aged 60 or older. The life expectancy at birth according to the latest report is 72 for males and 78 years for female [1]. There are three main races in the country namely, Melanesian the predominant population with 93.3%, Polynesian 3.1% and Micronesian 1.2% of the total population. Chinese, European, and other races consist of about 0.3% of the population [2,3]. The national literacy rate for the age group 15 years old and above is 84.1%. This represents the percentage of people who are able to read and write among this particular age group irrespective of their educational level. There are about 70 spoken languages in the country and English is the official language that is spoken by 69% of the population. The other nationally spoken language is Pidgin which is spoken by 66.6% of the population [2].

The climate in the Solomon Islands is relatively constant throughout the year with only very small changes from season to season. Across the Islands temperatures are strongly linked to changes in the surrounding ocean temperature with average temperatures that range between 27 and 28 degrees Celsius. The country has two distinct seasons; a dry season from May to October and a wet (rainy) season during the month of November to April with fierce tropical storms that often led to major disasters like

cyclones and flooding. Besides, its location within the Pacific "ring of fire," makes the country prone to earthquakes and tsunamis [4].

Economically, Solomon Island is classified as a lower-middle-income economy by the World Bank. The country's economy is based on subsistence agriculture supplemented by cash cropping (cocoa, copra, coffee, and palm oil), fishing, forestry, and mining. Most manufactured goods and all petroleum products are imported although the country has substantial deposits of lead, zinc, nickel, and gold which remain largely unexploited [5].

Current health issues and progress in SI

Recent report suggest that Solomon Islands showed an overall low level of development regarding its health care system as the country has to deal with both the control of communicable diseases and the increasing incidence of noncommunicable diseases with limited resources at hand [3]. Communicable diseases and other conditions as maternal, perinatal, and nutritional conditions accounted for an estimated 35% of all mortality in 2008. In 2010, the estimated cumulative cases of HIV dating from 1994 to the end of December 2009 was 13 of which five have died from fully blown AIDS and eight were still living. The confirmed cases and deaths from malaria and TB have substantially declined in the period of 2000-11. Note that while the prevalence rate may decrease from one year to the next, the actual number of cases may increase because of population growth. But, whatever the realities with the data, it is notable that there has been a dramatic drop in TB and malaria over the last 20 years [3].

Non-communicable diseases (NCDs) on the other hand accounted for an estimated 60 % of all mortality in 2008. The most prevalent forms are cardiovascular diseases that accounted for 29% of total deaths among all age groups. Other forms of NCDs

are cancers, respiratory diseases and diabetes that accounted for 10%, 5% and 4% respectively to the total mortality in the country (Commonwealth health report, 2014) (Figure 2).

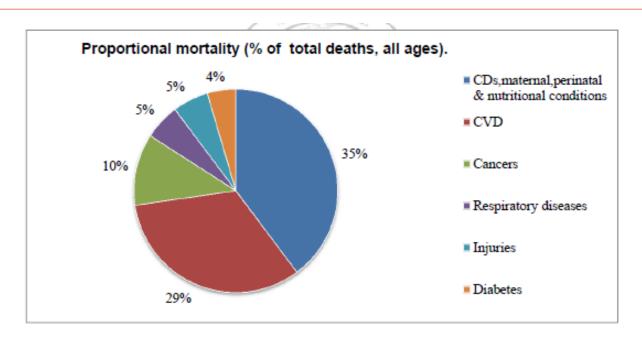


Figure 2: Shows the proportion of mortality related to Communicable & Non-Communicable diseases in SI. Source: World Health Organization-NCD Country Profiles, (2011).

The mortality rate among children and women of childbearing age in Solomon Islands is still unacceptably high. Reports revealed that the Infant mortality rate was 22 deaths per 1,000 live births and under-five mortality rate was 28 deaths per 1,000 live births in 2009. In 2011, neonatal conditions such as prematurity and pneumonia were the two major causes of death in children less

than five years with 19 % and 18 % respectively. Other causes of neonatal and child deaths included malaria, birth asphyxia and injuries with 9%, 7% and 3% respectively. In the period 2007-11, maternal mortality rate was estimated at 93 deaths per 100,000 live births [3] (Figure 3).

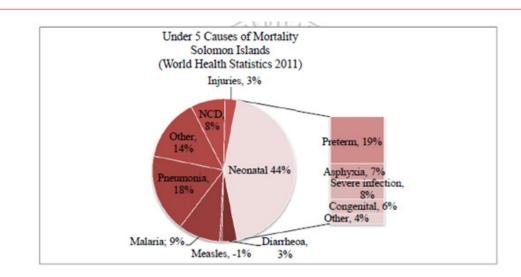


Figure 3: Shows the major causes of mortality in children less than 5 years. Source: SI Child Health Strategy (2011-15).

Additionally, beside these health issues, the country is facing a significant human resource deficit at every level of health care service with the health professional to population ratio of; 1 Doctor:7,510; 1 Registered Nurse: 883; and 1 Nurse Aide: 1,279

populations in 2010. Like Papua New Guinea a neighboring Melanesian country, Solomon Islands were listed among the 57 countries around the globe deemed to have a critical shortage of health care professionals [6] (Figure 4).

Facility	National Referral Hospital	Provincial and Church Hospitals	Area Health Centers	Rural Health Clinics	Nurse Aide Posts
Number	1	11	27	115	190
Average No. of Staff	621	58	8	3	1
Total Number of Staff	621	643	216	402	135

Figure 4: Shows the manpower distribution in the health care facilities throughout the SI. At present, most skilled health workers and resources are in the main centers.

Source: National Health Plan, (2016-20).

Of the current 86 practicing doctors, 73 are at NRH while the other 13 are at the provincial hospitals. It is evident from the data presented that there is disparity in the workforce distribution as most of the workforce is based at the National Referral Hospital (NRH) compared to other levels of health care facilities. Such a distribution of health workforce bears greater strain on the nurses who are serving as front liners in the peripheral health care facilities. Moreover, while delivering the significant health care services, the clinical nurses are confronted with numerous challenges in relation to poor infrastructure services as no proper road or bridges, rundown health care facilities with lack or scarce in resources and basic equipment's, unreliable transport systems and various geographical issues.

The geographical diversity of the country will always be a challenge to service delivery as the main form of transport is by the sea (outboard motor /ships) because the islands are scattered and there are few airstrips and no proper roads or bridges that connects most parts of the rural communities posing a challenge for the clinical nurses to conduct important programs as outreach services, school visits, home visits and follow-up activities within their catchment and to coordinate emergency referrals. In the coastal areas where outboard motor (OBM) is the main means of transport, the nurse will entirely depend on it to conduct outreach programs.

Likewise, to serve those living in interior parts of the islands, the nurses have to walk by bush paths to reach the communities as there are no proper roads and bridges access to most of these areas. To reach the distant communities, the nurses have to walk by the bush tracks climbing mountains, crossing terrains and rivers before reaching them. They run their activities the next day and then return on the following day. Additionally, since the Solomon Island is a disaster-prone country, bad weather can be a great challenge to service delivery as when travelling by sea or air is not possible for urgent referrals, the nurses have no option but to keep the patient in the health care facilities and continue to treat them there and if it is a very serious surgical or medical condition then mortality is

sometimes inevitable.

Service delivery model

As indicated in (figure 4) the Ministry of Health and Medical Services (MHMS) delivers its health services Nationwide through Hospitals, Area Health Centers (AHC), Rural Health Clinics (RHC) and Nurse Aid Posts (NAP) (Child Health Strategy, 2011-15). Among these health care settings, the AHC, RHC and NAP are situated in the rural communities managed by the Clinical Nurses (RNs) and Nurse Aides delivering health care service to the majority (80%) of the total population in the country [6]. Nurse Aid Posts (NAPs) are the basis of all health services. Most NAPs are located in remote areas staffed by the Nurse Aides offering basic clinical care as well as public health, prevention and outreach services like satellite clinics, school visits, home visits, health education and promotion. The clinical services include basic medical services as diagnosis and treatment of mild to moderate diseases or injuries, child welfare and immunization, antenatal care, normal labor and deliveries, post-natal, family planning and nutrition and referral to the RHC, AHC or Hospital.

Rural Health Clinics (RHC) offers the next levels of care and plays a supervisory role to multiple Nurse Aid Posts (NAP) within the catchment. The RHC are staffed by Registered Nurses (RN) and Nurse Aides (NA). The services

offered are as for NAPs plus admission and treatments of inpatient, community-based rehabilitation, malaria microscopy, treatment and care of chronic diseases including follow-up, primary eye care, treatment, care, and prevention of STIs and receiving of referral from NAPs and referral to the AHC or Hospital. Area Health Centre is the highest level of the three rural based health care facilities. These facilities are staffed by senior community health RN who are the overall supervisors, the midwives, registered nurses, nurse aides, malaria laboratory technicians and health promotion officers. The services offered are as for NAPs and RHCs including regular supervision of the NAPs and RHCs, on the job training for the NAS and RNs, Integrated management of Childhood Illnesses

(IMCI), regular meetings with the clinic committees, environmental health, drug and vaccine distribution to the NAPs and RHCs, health awareness programs, reproductive health services as insertion of Intrauterine contraceptive devices (IUCD) in women, discussing patients with the NAs and RNs in the NAPs or RHCs when seeking advice or during emergencies. Coordination and receiving of referrals from the NAPs and RHCs and referral to the Provincial hospital or the National referral hospital. There are no Doctors stationed at this level [6].

The provincial hospitals are located mainly in the provincial capitals providing hospital-based health care services for the rural based population. This is where the provincial doctors are based along with the registered nurses and nurse aides and other allied

health staff. There are no specialist anesthesiologists, surgeons or obstetricians who are based at this level and only eight out of the 10 provinces have provincial hospitals. The National Referral Hospital (NRH) is situated in the nation's capital, Honiara, providing the highest level of care in the country staffed by local clinical specialists and regular visiting specialists from abroad. Approximately 24% of the total health workforce is based at NRH; more than 84% of doctors, 100% of Specialists and 33% of Nurses and other Allied Health staff. Apart from these government owned facilities, there are also four private hospitals and several clinics owned and operated by various church organizations in the provinces as the Seventh Day Adventist Church, United Church and the Roman Catholic church [6] (Figure 5).

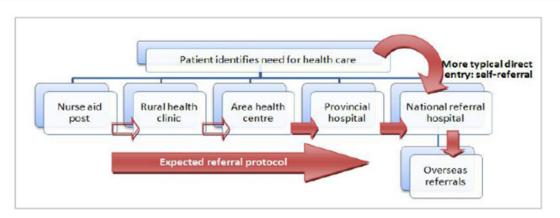


Figure 5: The figure shows the referral pathway to the hospital. Source: MHMS & WHO, (2012).

Referral pathway and linkages

Ideally, referrals flow from nurse aid post to rural health clinic, area health center to the provincial hospitals and finally the NRH (Figure 5). It is the responsibility of each facility to provide appropriate assessment and treatment then referral to the next level of health care facility. However, the flow of the referral can also be determined by the nature of the patient's case/condition. According to the Ministry of health's policy, patients can only be referred to the NRH if they have been seen at the provincial hospital. In practice however, this process can sometimes be bypassed, as for Rennell and Bellona and Guadalcanal provinces which has no provincial hospital, emergency referrals can be arranged directly from the area health centers to the NRH [6].

Summary

It is apparent that the Solomon Islands had gone through an overall low level of development regarding its health care system. Latest reports revealed that the country is still battling to control communicable diseases while non-communicable diseases consisting of diabetes, heart and respiratory diseases, cancers, mental health conditions, maternal and child health problems and injuries are increasing with poor infrastructure services and lack or scarce in recourses (NHP 2016-20). In spite of these challenges, the country has produced some of the better health outcomes for the

little money it spends on health. It is at or above the total disease burden level compared to other countries of similar socio-economic levels [3]. Recent reports suggest that the country has shown some improvement in the control of malaria and reducing TB and neonatal deaths but has plateaued in others (NHP 2016-20). Thus, this has called for the need for further strengthening of capacities within the health care system for effective service delivery.

Furthermore, as shown in the current health care service delivery model; the clinical nurses (RNs, NAs) played a vital role in every level of the health care service. They augment the services rendered by professional medicine by providing health care services both in urban and rural settings. Working alongside the physicians or in isolation, the nurses are at the forefront of delivering holistic care in primary and specialty patient care areas and serving the health care needs of the majority of the population in the rural Solomon Islands. Nevertheless, despite the important roles they played in the health care services, little is known about the challenges that may affect the development of their capacities in ensuring adequate performance in the country's health care system and this is a gap that this study wanted to explore.

Aim of the study

The aim of this study is to gain an understanding of the challenges regarding the existing capacity building initiatives of the

clinical nurses in Solomon Islands. As recognizing the challenges will pave the way for the development of strategies required to reinforce their existing capacities within the health care services for effective service delivery.

Chapter 2: Literature Review

This chapter will explore the concepts of capacity building including the definition, why the concept is important and its impacts on the organization, the existing capacity initiatives in the Solomon Islands and the capacity building framework that this study is based upon.

Background

The quality of the health care system in every country is greatly influenced by the capacity of those individuals responsible for delivering the health care services [7]. As such, capacity building has become a fundamental strategy to initiatives that are aimed at improving health care systems in many developing countries. International donors, the ministries of health and their important stakeholders are venturing into capacity building in pursuit of better health outcomes [8]. It is believed that capacity building contributes directly to improving performance in the health sector and is thought to play an important role in sustaining adequate performance. Nevertheless, this process requires time, human agency, and social structures, because its objectives are usually achieved over the long term [9].

Definition

According to Danet [10] "Capacity building is the activities which strengthen the knowledge, abilities, skills, attitude and behavior of individuals which in turn improved institutional structures and processes and places the recipient organization in a position to efficiently meet its mission and goals in a sustainable way". "It is an intentional, coordinated and mission-driven effort aimed at strengthening the management and governance of nonprofit organizations to improve their performance and impact. This occurs through organizational development activities such as leadership development, strategic planning, program design and evaluation, board development, financial planning and management and others" [11].

Impacts of capacity building in an organization

Research suggests that adequate nursing capacities improve patient health outcomes and has resulted in high levels of patient satisfaction and improved knowledge about self-care and management [12,13]. As clinical nurses assume greater responsibilities and expand their roles, it is important that they have the appropriate capacities to autonomously provide safe, appropriate, and effective care to their patients [14]. Capacity building advanced the capability of human resources and the organizations to effectively address and sustain the health care needs of their population at the highest level by enhancing the workforce knowledge and skills, workforce job satisfaction, good behavior and growth and organizational productivity.

Increase workforce knowledge and skills

An evaluation into a capacity building initiative for the midwives in Papua New Guinea a neighboring Melanesian country in 2015 showed increased capacity of clinicians in the participating sites. The study reported significant improvements in the safety and quality of health care delivery. As a result of the initiative there is now a qualified midwife in every health center who is able to manage complications that arise, and that clinical practice has improved due to the increased number of clinical meetings and outreach programs. The study has also reported that improved care by the midwives and nurses caring for women after miscarriages had resulted in a reduction of women presenting with sepsis and other complications resulting from unsafe village family planning practices. The initiative was said to have increased the knowledge and skills and build confidence among the staff which has resulted in improved quality of maternal and newborn care (Dawson et al. 2015).

Job satisfaction

Capacity initiatives strongly impact on the workforce job satisfaction. Job satisfaction is the extent to which people are satisfied or dissatisfied with their job [15]. Studies have shown that when the workforce are satisfied with their Job, they become motivated and put more effort towards their duties that can lead to improved organizational performance [16].

Additionally, many researchers have demonstrated strong positive correlations between job satisfaction of medical staff and patient satisfaction about the services they receive. As such, the key to enhancing effective health care service delivery requires an understanding of which domain of work are important for job satisfaction and enhance these areas for better performance because an organizations' efficiency depends highly on the morale of its workforce [16]. Consequently, by creating an environment that promotes job satisfaction an organization can develop employees who are motivated, productive, and fulfilled. This in turn will contribute to higher quality and safer health care services [17]. Bhatnagar and Srivastava (2012) outline the facets of Job satisfaction that can be used to improve workforce capacity which are divided into two categories: extrinsic and intrinsic variables. The intrinsic variables refer to workforce emotional reactions to features important to the work itself, like having the basic equipment's and manpower to carry out duties and having enough funds to support clinical programs and activities.

The extrinsic variables on the other hand, focus on issues that are external to the job itself such as pay increments and promotion or training opportunities for further advancement. Satisfaction can lead to good behavior and growth of the workforce that affects organizational functioning. However, Schermerhorn et al. (2011) points out that job satisfaction alone is not a consistent predictor of individual work performance and that other initiatives must also be addressed. Similarly, studies revealed that capacity building is associated with a range of improved organizational performance and clinical outcomes as measured by the Quality Outcome

Framework (QOF) [18]. Adequate capacity has substantially improved the functions that the clinical nurses undertake in chronic disease management, preventative services, sexual and reproductive health and advanced the clinical skills with positive outcomes and higher patient satisfaction [14].

Existing capacity building initiatives in the SI

In response to the immense health care burdens that the country has confronted, the Ministry of Health and Medical Services of Solomon Islands developed its overall organizational policies and priorities that are aimed at reinforcing the capacities of its health care professionals. The two main priorities are aimed at Human resource development and the provision of physical resources for effective health care service delivery in the country [3].

Physical resources

Provision of the required physical resources for effective service delivery is one of priorities that the ministry of health embarks on to boost the existing capacities within the health care services. Physical resources include improving infrastructure development as building or renovation of clinic facilities, staff accommodations and the provision of basic equipment's to the clinics or hospitals around the country for improved service delivery. Physical resources also include the provision of transport as vehicles or outboard motor to the health care facilities and setting up of communication system, a two-way radio wireless system for every health care facility in the country.

Funding is another important physical resource used to support service delivery capacity within the health care system and the government allocates funds to all the Provincial Health Service Headquarters on a monthly grant basis. These funds are purposely for the programs and clinical service delivery activities in the provinces as well as for the payment of salaries of the provincial directly employed Nurses, Nurse Aides, and other Allied Health Workers [3].

Human resource development

To support human resources development, the Ministry of health is focusing on planning, development, management, and monitoring because they are the most important aspects of human resource development that are critical to the overall performance of the health care system. Planning and development involve the decisions and priorities made by the ministry about which health cadres to develop with what skills and how many of each over the next decade. Furthermore, better planning allows allocation of funds required to support these initiatives and the distribution of required manpower to all the provinces including long term succession plans within the health care sector [3]. Similarly, the human resource capacity development involves the initiatives that concerns with continuous education needs of all the health care professionals like doctors, nurses, and other allied health care professionals locally and abroad. This can be in the form of formal or informal trainings as on the Job trainings through coaching and mentoring or conducting regular workshops or refreshers that are aimed at specific programs and awarding of post graduate

scholarships for specialty trainings locally and abroad. Apart from the human resource development initiatives, the ministry of health had recognized the importance of management and monitoring of its human resources. These initiatives are aimed at boosting staff morale or motivation at work through conducting regular appraisals for evaluation and feedback on staff performances and awarding of incentive as promotion, increments in recognition of workforce accomplishment [3].

Bachelors in nursing program

As part of the initiatives specifically aimed at building the capacity of the clinical nurses in the Solomon Islands, the Ministry of health in collaboration with the School of Nursing and Allied Health Sciences at the Solomon Islands National University (SINU) with the technical support from the Auckland University of Technology developed the Post Graduate Degree Programs in Acute Care Nursing, Primary Health Care and Midwifery. The core goal of the programs is to produce well educated, competent graduates who have the advanced knowledge, skills and practice required to show leadership in the safe and effective delivery of nursing care to individuals, families, and communities in the Solomon Islands. Furthermore, the program is aimed at enhancing the academic ability of clinical nurses to proceed to postgraduate of education and to contribute in a meaningful manner to the health development in the Solomon Islands [19].

Apart from the core program goals each strand of specialized program has its own specific goals. The acute care graduates will be able to effectively assess, diagnose and manage the acutely ill patients admitted to the hospital. They will be able to understand and effectively manage the seriously ill child in hospital and be able to develop and implement discharge plan for patients and effectively communicate the patients' care to the primary care nurses where appropriate. Similarly, the Primary Health Care graduates will be able to demonstrate effective assessment diagnosis and management of health and health problems for patients/families and communities. They should be able to apply the principles and concepts of primary health, management, prevention, and health promotion in community nursing practice. Additionally, they should be able to effectively manage population health with emphasis on family and village health.

The midwifery graduate will also be able to demonstrate advanced knowledge and ability in the assessment, diagnosis and management of pregnancy, labour, neonatal care, and reproductive health. They should be able to manage the care of women who have complex pregnancies and show nursing leadership in obstetric and reproductive health including effective delegation and supervision of nurses and other health workers managing the care of women during pregnancy. They should be able to apply the principles and concepts of primary health to promote maternal, child and family health in order to reduce maternal and infant mortality and morbidity at a local, provincial, and country level.

The program duration is 12 months for the primary health care and acute care programs and the midwifery program is 18 months. This duration includes theoretical components and clinical

practice in various hospitals around the country. Since the program was introduced in 2011 up until 2015, a total of 144 nurses have graduated with bachelors' degree in Primary Health Care, Midwifery and Acute Care with 64, 66 and 14 graduates respectively. Evidence that students are meeting the outcomes of the course are yet to be evaluated as most of the nurses are employed by the government

and are dispersed all throughout the health care facilities around the country and this is another gap that is yet to be addressed in the current initiatives. To attain these postgraduate degree courses, the requirement is for the nurses to have completed a diploma program in nursing at SINU or elsewhere with at least two years' experience in clinical practice [19] (Table 1, Figure 6).

Bachelor of Nursing Program						
Acute Nursing Practice	Primary Health Care	Midwifery				
Core Courses: Leadership and Management Research and Evidence Based Practice Applied Science and Pharmacology						
Assessment and Diagnostic Inquiry Acute Nursing Practice Acute Nursing Practice Management of the ill Child	Assessment and Diagnostic Inquiry Primary Health Primary and Population Health Child Health Management	Science in Reproductive Health Management of Pregnancy Care of the Newborn Registered Midwifery Practice				

Figure 6: Core Courses Offered in the bachelor's Programs.

Table 1: Pathway to bachelor's degree in SI (Isom, Larui & MacManus, 2011).

Pathways to bachelor's degree					
Year of study	Program	Comments			
Year 4	Bachelor of Nursing	BN Midwifery			
	2 Years RN practice	MOH Requirements			
Year 3		3Yr Level 6 Diploma			
Year 2	Diploma in Nursing	Lead to Nursing			
Year 1		Registration in SI			

Capacity building framework:



Figure 7: Shows the capacity building framework (Connolly & Lukas, 2014).

A capacity building framework is important to guide the development of effective capacity building initiatives within a nonprofit organization like the health sector. As such, this study has adopted a capacity building framework (figure 7) from Connolly & Lukas (2014) as it draws most of the interdependent key elements that underpins the framework for organizational capacity building (Figure 7).

Mission

The mission, vision and strategy are the core elements of capacity framework as they are the main driving forces that give the initiative its purpose and direction to move. A mission statement guides the overall decision making and offers an insight for the leaders to understand the primary purpose for taking up the initiative and decide on what decisions and tasks are best aligned to accomplish the mission of the capacity building. Generally, the mission is geared towards the service delivery and impacts which are the primary reasons for implementing capacity initiatives (Connolly & Lukas, 2014). As such the mission of this capacity initiative is to reinforce clinical nurses' capacities for effective service delivery and improved health outcomes of the patients.

Vision

A vision statement on the other hand, foresees a long-term direction for the organization for instance; in the next five to 10 years. It adds an element of human values to the mission that can be achieved long term which in turn motivates employees and gives them a sense of purpose by visualizing their future [20]. In capacity building, the long-term vision is improved workforce and organizational practices which are sustained and reducing reliance on external assistance over long term and enable the organization involved to mobilize themselves when required and initiate new action for new health challenges [9].

Service delivery & Impact

Service Delivery and Impact are the core reasons for initiating capacity initiatives whereby all the key elements are geared towards service delivery and the impacts. The impacts expected are positive impacts that fulfill the mission of the initiative and should address the needs of both the service deliverer (nurse) and the recipient (patient). Thus, the impacts should improve workforce capacity through the development of knowledge, skills, attitudes, and behavior for effective service delivery which will in turn contribute to quality health outcomes for the patients with increase satisfaction on the care received. In order to measure these impacts this particular element includes outcome measurement and program analysis and evaluation. As such, a proper plan for monitoring and evaluation should be designed right from the beginning as monitoring will provide sufficient evidence to inform future decision-making and changes in the strategy and to ensure accountability of both the local and international partners. Similarly, evaluation is important to determine the best way to achieve the expected results and the impact of capacity building on the skills, services, and health outcomes of the patients (Hawe, King, Noort, Gifford & Lloyd, 1999).

Strategic Planning/Relationships

Strategic planning is the actual process of developing the objectives, strategies and tactics that will be employed to achieve the mission of capacity building. When building health capacities, the initiatives taken need to be carefully designed or planned right from the start in order to achieve the set goals. In this process, it is essential that the pre-existing capacities in the country are carefully identified. The need, therefore, is to reinforce the existing capacities, rather than to start from scratch [21].

Additionally, despite the belief that change is expected through capacity building, it is often difficult for an organization to change without external assistance or unless incentives exist within the organization itself. As such, capacity building requires the development of human resources and provision of required physical resources through collaboration of the local ministry, government, and the donor organizations [22,23].

Resource development

Resource development in capacity building involves the actions taken by the organization in developing its physical and human resources to achieve its mission. This includes securing and allocation of funds needed for capacity development, continuous education programs as workshops, refreshers or on the job trainings as mentoring and coaching or post graduate trainings. Providing basic equipment, maintenance and repair of facilities or construction of new facilities to enhance service delivery capacities of the clinical nurses.

Internal management and operations

Similar to resource development, this element includes the internal operations in the organization to ensure that the capacity initiatives taken are vibrant. This includes financial management, expenditure procedures and accounting or auditing to ensure transparency and accountability. Coordinating and supporting the activities with resources such as funding or transport. Management of human resources like appraisals or awarding of incentives like increments or promotion, or procurement of basic drugs and equipment's required to boost service delivery capacity.

Governance and Leadership

Strong leadership is one of the factors that ensure success in capacity building. Capacity building is a team effort that requires good leadership and support from everyone in the organization. Such initiative needs to have a team for instance, a steering committee that will govern and have a primary responsibility to oversea or leading the organization's engagement in the core capacity building activities and this is an element that is missing in the current capacity initiatives of the clinical nurses in the Solomon Islands.

Summary

Capacity building is a very important concept that has become fundamental to strategies aimed at improving health care systems in many developing countries. As in any other sector, the concept is

significant to the nursing organization as it improves the knowledge, abilities, skills, attitude, and behavior of individuals' nurses to lead implication within the organization. Furthermore, it reinforces the nurses' capacities to autonomously deliver quality health care services thereby achieving the organizational mission and goals. Literatures indicated that improved nursing capacities have contributed directly to improved patient outcomes and high patient satisfaction. Nevertheless, to be successful a capacity framework is important to guide the development of such initiative over long-term and this process requires the collaboration and support of the local ministry, the government and its important stakeholders.

Research questions

The research questions allow the researcher to focus on the goal of the study and are based on the phenomenon and the group or population of interest in the study [24]. Here is the question that this study would like to

Answer: What are the challenges that the clinical nurses in Solomon Islands encountered regarding the development of their capacities to deliver effective health care service?

Definition of terms

This section defines the terms and how they have been used in the study.

Capacity building

The initiatives taken to advance the capability of clinical nurses to implement health care services. This can be in the form of professional development programs as continuous education and/or the support given to enhance their knowledge, skills, attitude, and the provision of required physical resources.

Clinical nurses

This refers to all the nurses who are directly engaged in the provision of patient care or other health care services like health education and promotion irrespective of their specialty.

Physical resources

This includes all the resources such as the clinic infrastructures, rooms, spacing, beds or the condition of the structure itself, basic equipment, finance, transport, and other necessary resources required for service delivery.

Basic equipment's

This refers to the equipment's required for day-to-day function like; BP machines, thermometers, stethoscopes, auroscopes, glucometers and alike.

Continuous education

Short- or long-term professional development programs like workshops, refresher, and on the job training like mentoring, coaching or full-time training both locally and abroad.

Human Resources, Workforce, Manpower, and Staff

This refers to the clinical nurses serving in the organization.

Chapter 3: Methodology

This chapter outlines the methodology of the study including the study design, setting, sample, data collection methods, ethical consideration, rigor, and the data analysis method that was employed in the study.

Research design

A qualitative research design with in-depth individual interview was conducted in a field study in various health care facilities and departments in Honiara in 2015. Qualitative design was selected because it is suited to explore when little is known about a subject or phenomenon (Hall, 2005). The participants were 10 clinical nurses who were selected through purposive sampling. Purposive sampling was employed because of the pre-selected criteria to include only those who meet specific criteria based on the study aim [25]. Thus, included in the study were senior clinical nurses with more than 10 years of clinical experience having the concept that their vast experience they may bring a broad spectrum of information on the phenomenon under study (capacity challenges encountered during their years of service). Education wise, included were bachelors, diploma, and certificate holders (Table 1) and only those who were genuinely willing to participate and be prepared to offer information freely.

Data collection

The data was obtained through semi-structured open ended individual interview. The main content of the questionnaire asked were questions relating to human resource development and physical resources which were important for enhancing nursing capacities (Appendix 2). Each participant was interviewed by the researcher, who is a pediatric nurse with more than 15 years of experience in field of nursing working both in the hospital and community health care settings in the Solomon Islands. For selfpreparation, the researcher and his assistant had gained some prior knowledge about nursing research and qualitative research design while attending the masters training at Kaohsiung Medical University where the research course was thought for about 36 hours in class sessions and further familiarities were also gained through reading other similar studies from others work. During each session of the interview, the researcher established rapport in the opening moments by welcoming and acknowledging the participants for their willingness to participate in the study. A brief introduction was done for the researcher and assistant and the participants were also allowed introduce themselves. Following that, the purpose and the importance of the study was explained, and the participants were encouraged to be frank from the outset of each session with the researcher indicating that there are no wrong answers to the questions that were asked and all of their contributions are important to the purpose of the study to enable them to contribute ideas and talk of their experiences without fear of losing credibility in the eyes of their superiors (Appendix 1). Open-ended questions were used (Appendix 2) to encourage participants to reflect on their own experiences and leading questions were asked whenever necessary to obtain clarity on the

participants' accounts. A recording sheet was also used to obtain field notes and record the non-verbal gestures of the participants (Appendix 3). The individual interviews were audio recorded in a quite clinical setting (room) at every facility with an average session that lasted for about 60-90 minutes. At the end of each interview session, the researcher thanks the participants for their time and contributions and gifts were given as a token of appreciation for their participation.

Rigor

The concept of rigor is significant to the fundamental trustworthiness of qualitative research. As such, the steps of a qualitative inquiry must conform to this concept [26]. Hence, this $study \, has \, incorporated \, Guba's \, constructs \, to \, address \, trustworthiness$ [27]. Verifications regarding data accuracy were made at the end of each data collection dialogue, and some participants were revisited and asked to read the transcripts of their own accounts to reinforce confirmability. To achieve consensus and dependability, coding checks for data quality or flaws were made through constant comparison with the original data/reflective journals [28] during the process. In addition, prolonged engagement with data and peer (expert) debriefing was ensured for data credibility. Employing the same study in three different clinical settings with participants of similar characteristics could well be of great value to the concept of transferability. To maintain audit trail, a chronological document of the activities related to the study process was developed and kept in a Microsoft file.

Ethical considerations

The study was granted approval by the National Health Research and Ethics Committee (NHREC) of the Ministry of Health and Medical Services of Solomon Islands; certificate No.15/25 (Appendix 6). An information sheet containing details of the study

at any stage unconditionally was provided to all the participants (Appendix 5). An informed consent was also obtained prior to their participation (Appendix 4). Codes were used to represent the individual participants in the study.

and their rights to refuse, participate or withdraw from the study

Data analysis

Thematic analysis was used to identify themes relevant to this study. This was done by listening to the audio record and transcribe it verbatim and translating it to English by the researcher. This process begins at the end of each data collection session. The notes taken along with the observations were also compared and included for the transcription because non-verbal gestures and behavioral responses are vital information in which interpretations and conclusions of the findings can be drawn. Transcripts were read and examined thoroughly by the researcher and were open coded into several sub-themes. The sub-themes were then merged into major overarching themes. Once this process was completed, a description of the result was written.

Chapter 4: Results

This chapter is going to present the findings of the study including the participant demographics, the overarching themes, and the subthemes relevant to this study that were identified through thematic analysis. The 10 participants were aged 37-49 years (mean 43.6) with vast work experience ranging from 10-24 years clinical experience (mean 19.4) at the time of the interview. Their positions are Clinical Nurses (CN) and Clinical Nurse Consultants (CNC) from various departments and Health Care Centers in Honiara. Regarding their educational background: Six have bachelor's degree in nursing, two have diploma and two have certificate in general nursing (Table 2).

Table 2: Participants Demographics.

ID	1	2	3	4	5	6	7	8	9	10	
Gender	F	F	F	F	F	F	М	М	F	F	
Age at interview yrs	43	49	45	46	43	42	43	37	45	43	
Mean age											43.6
No. years in service	19	24	21	22	19	18	19	10	23	19	
Mean years in service											19.6
Education	BN	BN	BN	BN	BN	BN	DP	DP	Cert	Cert	
Current position	CNC	CNC	CNC	CNC	CNC	CNC	CN	CN	CN	CN	

Key:

Cert- Certificate in Nursing Dip - Diploma in Nursing BN- bachelor's in nursing

CN- Clinical Nurses CNC- Clinical Nurse Consultant (Head Nurse).

The four themes emerged from the study were: Professional development initiatives, Lack of motivation, Manpower deficit and Insufficient funding. These overarching themes included various

sub-themes (Table 3) which are described in detail in the study and the quotes were ascribed to specific participants (Table 3).

Table 3: Shows the main theme and sub-themes emerged from the study.

Themes	Sub-themes			
Theme 1: Professional	· Limited opportunities for specialized training			
development initiatives	· Lack of on-the-job training			
Theme 2: Lack of motivation	· Inconsistencies in performance appraisal			
i neme 2: Lack of motivation	· Lack of incentives			
	· Long waiting hours			
Theme 3: Manpower deficit	· Increased workload			
Theme or Hampower denote	· Clinical nurses drawn to administrative positions			
	Lack of fund for clinical and outreach services			
There A. Lee (Color) Color	· Lack of fund for ongoing training			
Theme 4: Insufficient funding	· Lack of basic equipment's			
	· Lack of basic health care service infrastructure			

Theme 1: Professional development initiatives

This theme encompasses the issues surrounding the professional development of clinical nurses as formal and informal educational initiatives. Two subthemes emerged from this theme were: Limited opportunities for specialized training and Lack of onthe-job training.

Sub-theme: Limited opportunities for specialized training

This sub-theme pertains to the opportunities for specialized training given to the clinical nurses. The participants expressed the need to support them with opportunities for specialized training in nursing to advance their knowledge and skills for effective service delivery.

- A participant said: "I think one of the factors that need to be considered if we want to improve our human resources is to provide more training opportunities and motivate the nurses to assume specialized trainings and not only in general nursing because medicine is changing".
- Similarly, another participant said: "Specialist training that are not offered locally are usually attained abroad, but the SIG does not support specialized trainings from the departments, so we have to look for other scholarships to support our nurses' trainings".

Sub-theme: Lack of on-the-job training

On the job training refers to the initiatives aimed at improving the individual's performance on the job either by enhancing their current skills or acquiring new skills through mentoring and coaching. This is significant for the new graduates and other staff who are assuming new responsibilities within the organization. The participants expressed that this form of support is very important, but generally has been ignored.

• A participant said: "Initially, when I assumed this responsibility, no proper support was given to me. I just took up

the challenge of trying to fulfill all the expectations at this level. But, I think, mentoring and coaching is important for someone assuming new responsibilities and for the new graduates".

• Similarly, another participant said: "Since I was posted here to take up this responsibility, I have not experienced such support at all. I have never been coached or mentored by our senior officers".

Theme 2: Lack of motivation

Motivation is that internal drive that causes an individual to decide to take action. Since health care delivery is highly labor-intensive, the quality efficiency and equity of the service are all influenced by providers' motivation and willingness to implement their tasks. The study identified several issues relating to staff motivation that are sub-divided into the following sub-themes: Inconsistencies in performance appraisal and Lack of Incentives.

Sub-theme: Inconsistency in performance appraisal

Appraisal reviews the overall staff performance and potential that may be linked to awarding incentives which can benefit both the staff and the organization by boosting motivation and improving job performance. The study revealed inconsistencies regarding performance appraisals. Besides, the process is vague resulting in conflicts among some managers.

• A participant said: "I think this is one of the gaps in our department as staff appraisals are not done regularly. I worked here for more than 10 years, and I remember that I filled in the appraisal forms only three times".

Similar sentiment was raised by another participant who said: "Currently, the process of appraisal here is somewhat vague because sometimes they are being done by the bosses without consulting us the immediate supervisors. We question this process because we feel that we should be part of the process".

On the other hand, a participant said:

"I think regular appraisal is important because when my boss

appreciates my contributions and gives positive feedback; it makes me feel good and motivates me to do even more".

Sub-theme: Lack of incentives

Incentives encompass promotion, increments and training opportunities. These participants associate incentives with assuming greater responsibilities, higher status, and better salary and this plays an important role in staff motivation. On the other hand, when incentives are not awarded the staff become demotivated and exhibit negative work attitudes.

- A participant said: "The reason why a lot of nurses have resorted to lateness or absenteeism at workplace is because of the increments or promotion. Nurses have never got promoted for how long they work; nobody recognizes them for their hard work".
- Similarly, another participant said: "When promotion does not happen so easily, it can be very frustrating for the staff. For instance, getting someone from a different facility to come and fill up the vacant post in our department instead of promoting our own hardworking staff is a demotivating factor for the workforce".

Theme 3: Manpower deficit

As in any other organization, human resources play the most important role in the health care system. The study revealed that manpower deficit has a negative impact on the quality of services and the work force. Three sub-themes emerged from this theme were long waiting hours, increased workload and clinical nurses drawn to administrative positions.

Sub-theme: Long waiting hours

The study revealed that manpower deficit had resulted to long waiting hours for the patients who seek health care services.

• A participant said: "I think manpower is an issue in our department, as lack of manpower has resulted in long waiting hours for the patients accessing care. As such we have received complaints from the public regarding the services we deliver".

Sub-theme: Increased workload

The study revealed an increasing workload for the limited number of staff at disposal.

- A participant said: "Since there is increase in urban migration, we have experienced an increased influx of patients accessing our daily health care services placing increased burden to the limited number of staff we have".
- Similar sentiment was raised by another staff who said: "I think manpower is an issue here in our facility. As such, our boss, who should be concentrating on administrative matters, must spare most of her time just to come and assist us in delivering the clinical services".
- Another participant said: "Generally, the ward is often very busy placing increased workload to our limited number of nurses. There are times when we have only two to three staff in

a shift manning the whole ward that is often very challenging for our nurses".

Sub-theme: Clinical nurses drawn to administrative positions

The study revealed that the higher the qualification the clinical nurses get, they are likely to be given administrative positions and this is one of the reasons why there is deficient of manpower in the clinical sector as there seems to be a shift within the system.

- A Participant said: "I think the biggest problem I see regarding manpower is that a lot of posts have been created within the system that has drawn a lot of our clinical nurses into administrative positions leaving a huge gap in the service delivery sector".
- Another participant said: "Several posts have been created within the department, so we need to identify the officers that will fill those posts. As such, this has limited the manpower we have to implement the clinical component of the health care services".
- Similar sentiment was raised by another participant who said: "What I noticed recently is, whenever nurses are graduating with higher qualifications as postgraduate degrees, they are likely to be given administrative positions like program coordinators in the organization/department which often lead to lack of manpower for clinical service delivery".

Theme 4: Insufficient funding

Funding is the provision of money to meet the cost of a need, program, activity, and project. Lack of funding has been a major challenge towards implementing clinical and outreach services, conducting training programs, procurement of basic equipment and in the maintenance of health care service infrastructures.

Sub-theme: Lack of funds for clinical and outreach services

Clinical services refer to the services offered in the facility on a daily basis and outreach services are offered regularly through visiting the communities within the catchment. Lack of funding has limited the nurses' ability to implement such services.

- A participant said: "We need money to hire transport to conduct outreach services, collect our medical supplies and transfer patients to the hospital during emergencies as our facility does not have a vehicle. This is very challenging for us because without funding how could we be able to provide such services"?
- Similarly another participant said: "We need transport to mobilize the nurses to implement the outreach services in our catchment areas, but for our facility to have a transport of its own requires funding".

Sub-theme: Inadequate fund for ongoing training

Ongoing training refers to the continuing education initiatives aimed at developing and regular updating the clinical nurses

through training workshops, refresher courses and supervisory tours. Lack of funding has been a challenge to such initiatives.

- A participant said: "This year I planned a quarterly supervisory visit to the health care facilities and two training workshops for the nurses, but I am yet to conduct one because of lack of funding".
- Similarly, a participant said: "So far we have conducted two reproductive health training courses for our nurses this year, but not all of them attended because there was limited funding for the program".

Sub-theme: Lack of basic equipment's

Some facilities and departments experienced regular out of stock on the most basic equipment's (BP machines, stethoscopes, thermometers, auroscopes) needed for service delivery and getting replacement in time is usually impossible due to lack of funding.

- A participant said: "We experienced regular out of stock on basic equipment's, but we cannot afford new ones in time because there is no separate budget for the equipment's in the department. So, it is the budget, it is beyond us. There are supplies coming in as donations but again sustainability is a big issue".
- Similarly, another participant said: "The national medical store is the main supplier of equipment's to all the health care facilities around the country, but if the equipment's we need are unavailable, then we have to wait for a long time before receiving replacements because they have to order them overseas".

Sub-theme: Lack of basic infrastructure

Basic infrastructure refers to the issues relating to the health care facility structures such as the condition, size and space of the facilities that have hampered effective health care services delivery.

- A participant said: "The layout of the infrastructure has affected our capacity to maintain workflow. The rooms are not spacious with limited beds which do not cater for the increased number of patients we see every day".
- Another participant said: "The health care facility that I manned has been closed for few months now as its structures are very old and need repair. Thus, this has interrupted the most needed services that we render to the population and has prevented us from achieving our set goals".
- Similar sentiment was raised by another participant who said: "Our facility is not spacious and is too small to serve the increasing population under its catchment. Currently, we need to extend the waiting area and include a room for malaria laboratory but then it all depends on when the funding is available".

Chapter 5: Discussion

The findings of study involving the clinical nurses revealed the need to support them in professional development initiatives as assuming of training in specialized areas in nursing as such trainings

will reinforce their standard of practice within the organization. This notion was supported by Hakim [29] who proposed that professional development improves the quality and delivery of health care services through the development of knowledge, skills, attitudes, and behavior. Thus, the managers need to recognize the importance of nurses' continual learning by to supporting them and allow time for such initiatives and that nurses should encourage other staff, which may be wary of change, to update their skills through professional development [30].

Similarly, continuous support for improving the individual's performance on the job through coaching and mentoring are significant for the new graduates and those assuming new responsibilities within the organization to allow successful acquisition and mastery of the required knowledge and skills through guidance and correction, thereby demonstrating safe and competent care and be able to adapt to the everchanging environment. Besides, such support enhances self-confidence and empowers the staff to be more productive (CPD Model, 2007).

Regular staff appraisals and the awarding of incentives are crucial. Appraisals allow managers to track and review the employee strengths and weaknesses; provide feedback to the staff to show where improvements are needed and why that is necessary and to correct bad work habits. Individual nurses need the positive reinforcement of knowing that their contributions are valued by senior management. Giving feedback will motivate the staff to strive for improvement. By giving employees regular feedback about their performance, managers open up the lines of communication, enabling a good working relationship and encouraging a spirit of collaboration.

Furthermore, performance appraisals are the only way to consistently track exceptional performance and identify the best candidates for promotion and further training that will boost workforce morale [31]. Most importantly, employees should be appraised by their immediate managers on the grounds that those who delegate work and monitor performance are best placed to appraise performance (Advisory booklet, 2006). Conversely, inconsistent appraisal will lead to limited chances of professional development permitting demotivation and job dissatisfaction emerging within the workforce [32].

Awarding of incentives through promotion, increments and training are important, because the participants associate incentives to assuming greater responsibilities, higher status, and better salary. Literature suggests that incentives are the key motivators in an organization that drive the staff to strive for improvement [31,33]. Conversely, the study revealed that a demotivated workforce may exhibit negative work attitudes such as recurrent absenteeism, lateness and underperformance which is in congruent with the findings by [32]. Besides, there will be insufficient translation of knowledge, underutilization of available resources and weak health system performance [33]. Manpower deficit has been identified by the study as one of the issues that have affected staff capacity and the quality-of-service delivery. This has led to an increase in workload to the limited number of

staff at disposal resulting in prolonging waiting hours for the patients accessing care and that the patients to be unsatisfied with the service they get. Furthermore, the study highlighted that one of the underlying causes for manpower deficit is drawing many nurses into administrative positions leaving a huge gap in the service delivery sector. The current practice is that many nurses, when graduated with higher qualifications as bachelor's degree in specialized areas of nursing have been promoted to administrative positions rather than leading in clinical practice as clinicians. This finding supports a report by Dieleman & Harnmeijer (2006) who states that poor performance is a result of health staff not being sufficient in numbers. As such, having the right number of staff for clinical service delivery will ease this situation [33] and quality service delivery that will promote high levels of patient satisfaction [12,13].

Lack of funding has been a major challenge towards service delivery capacities as the clinical and outreach services and to support and sustain professional development programs as; trainings workshops, refreshers, or funding of scholarships locally and abroad and in the procurement of basic equipment's needed for service delivery. Continuing education is required to ensure that the clinical nurses are aware of and prepared to meet the country's present and future health care needs because a welltrained and competent workforce is essential to a successful health care system [7]. Furthermore, supporting the workforce with basic equipment is important as it will enhance effective and efficient service delivery. Similarly, issues related to infrastructure such as the condition and space in the facilities have hampered the nurses' service delivery capacity. Dieleman and Harnmeijer (2006) states that to ensure good performance, staff members need to have an adequate working environment in terms of spacing, acceptable workload with adequate supplies and equipment. Similarly, Lafond, Brown and Macintyre (2003) pointed out that individual workers no matter how skilled they are, will be unlikely to deliver effective services without adequate resources, proper motivation and support and a good relationship with their subordinates and the communities they serve.

When linking the findings to the capacity building framework, professional development initiatives as assuming of specialized training in nursing and continuous support for improving the individual's performance on the job through coaching and mentoring are major components of the element strategic planning, resource development and internal management that are geared towards achieving the service delivery and impact and the mission and vision of capacity initiative. Most importantly, monitoring and evaluation are crucial components of service delivery and impact because it will provide sufficient evidence for decision making and any changes in the strategy. Similarly, regular staff appraisals, incentives and having the right manpower are key components of both the elements resource development and internal management and operations in the capacity framework that are crucial for staff motivation and the quality of health care service delivery. Moreover, securing and management of funding is part of resource development and internal management and operations in the capacity framework that are crucial to support and sustain

professional development, procurement of basic equipment's, construction and maintain infrastructures required for effective service delivery.

In order for a capacity initiative to be successful the elements; mission, vision and strategy within the framework are significant as they guide the overall development of the capacity building initiative. Besides, the element governance and leadership are crucial within the organization because strong governance and leadership are the pre-requisites to the success of any initiatives as capacity building within the organization. We need leaders with good leadership and management skills to oversea and guide the successful implementation of capacity initiatives [34-37].

Significance

The finding of this study is significant because highlighting the challenges encountered by the nurses is a first step towards initiatives aiming at reinforcing nursing capacities in the Solomon Islands. Besides, the finding is significant for the responsible ministry, the government, and its important stakeholders to develop strategies required to reinforce nursing capacities in the Solomon Islands. This will enable the clinical nurses and the organization to effectively address and sustain the health care needs of their population at the highest level by enhancing the workforce knowledge and skills, workforce job satisfaction, work force retention, good behavior and growth and organizational productivity.

Limitations

Including only the nurses who served more than 10 years can be a limitation to this study as those with less than 10 years clinical experience may have given different viewpoints regarding the challenges encountered in capacity development. Additionally, time factor is another issue as the study was conducted during semester break so there is very limited time for data collection. On the other hand, the diversity of Solomon Islands geographically makes it difficult to recruit participants from other provinces.

Chapter 6: Conclusion

The study highlighted several challenges that are encountered by clinical nurses while delivering health care services. The findings can be summarized into the initiatives that are aimed at the professional development and service delivery capacities of the clinical nurses as education opportunities for specialized trainings, continuous on the job training through coaching and mentoring, regular staff appraisals, incentives, manpower, basic equipment's and infrastructure and financial support. Finance is the most important resource that has been identified as a challenge for both the professional development and the service delivery capacity of the clinical nurses.

The results of this study signified that reinforcement of the clinical nurses' capacities need to address both their professional development and their service delivery capacities. As such, adequate support is warranted because professional development will improve the standards of healthcare practice through the development of knowledge, skills, attitudes, and behavior of the

workforce. Furthermore, supporting them with adequate recourses will enhance effective and efficient service delivery which will promote high levels of patient satisfaction. Therefore, for clinical nurses to acquire and develop the required levels of capacities, the nurse leaders and the government along with its important stakeholders must collaborate to support all the efforts necessary to reinforce the existing capacities. This will equip the nurses with adequate knowledge, skills and

resources to deliver effective health care services and address the immense health disparities in the country so that "The People of the Solomon Islands will be Healthy, Happy and Productive" [37-40].

Future research

Further studies are needed to explore the capacities of clinical nurses specifically in the different levels of the health care services and to explore specific capacities as highlighted in the study.

Research Certificate

То

The National Health Research & Ethics Committee (NHREC) of the Ministry of Health & Medical Services, Solomon Islands has deliberated on 15th June 2015 and has approved your application to do research titled "An exploration into the capacity building initiatives for clinical nurses in Solomon Islands".

You are hereby granted permission to conduct your research in Solomon Islands for your proposed duration in 2015 only. This approval is for the one-time conduction of your research and any amendments, repetition and/or extension of this research will need further NHREC approval. A report is to be submitted to the committee upon completion of this approved term of research. Failure to abide to the above terms will result in suspension or discontinuation of approval.

Dr Christopher Becha

Date

Caleb Mark

Master's Student in Nursing

Kaohsiung Medical University, Taiwan.

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Thank you.

Caleb Rale Mark

Conflict of Interest

No Conflict of interest.

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Appendix

Appendices

Appendix 1: Interview Guide

Thanks for agreeing to be part of the interview. We appreciate your willingness to participate.

A. Introductions

- The team
- Concerns

Purpose of the Study:

- This study aims to gain an understanding of the challenges regarding the existing capacity building initiatives of the clinical nurses in Solomon Islands.
 - We need your input and want you to share your honest and open thoughts with us.

Ground rules:

- 1. We want you to do the talking
- We would like everyone to participate.
- 2. There are no right or wrong answers.
- All person's experiences and opinions are important.
- Speak up whether you agree or disagree.
- We want to hear a wide range of opinions from everyone.
- 3. What is said in this room stays here.
- We want individuals to feel comfortable in sharing when sensitive issues come up.
- 4. We will be audio recording the interview.
- We want to capture everything you have to say.
- Everyone will remain anonymous in our report.
- B. Main Part of the interview
- Main questions
- C. Thank the participant.

Appendix 2: Interview questionnaire

Human resource development: Human resource development is one of the most important components of capacity building as human resources are the main implementers of the health care services. One of the significant key areas regarding human resource development is continues education or training.

Training needs: Question 1: Do you have continuous educational or training programs that are aimed at strengthening the clinical nurses' capacity at your workplace? For example: on the job training, regular workshops, or refresher courses etc.... If yes, then how often is this training conducted?

Question 2: How do you identify the staff to offer further training locally or abroad? Is it through the recommendation of the immediate supervisors, the management's decision or through the staff development plan?

Question 3. Do you encounter any problems regarding the educational training initiatives both locally and abroad? For instance, the opportunities you have and regarding the scholarships.

Supervision and support: Question 4: Do you receive regular supervision and support from the senior managers at your workplace? If yes, then how often are these supervision visits conducted? For example: regular visits to find out any urgent issues that may need to be resolved immediately, or for coaching and mentoring purposes.

Staff appraisal: Is the process by which a manager examines and evaluate a staff's performance by comparing it with preset standards, documents the results of the comparison, and uses the results to provide feedback to the staff to show where improvements are needed and why. This can also be used to determine who needs what training, and who will be promoted, demoted, retained, or fired.

Question 5: How often is the staff appraisal conducted for the nurses at your workplace?

Incentives at work: Incentives are recognition of the staff for their hard work and accomplishments achieved. These recognitions can be given in the form of a promotion or salary increments or any form of token of appreciation or even just praising and thanking the staff will motivate them to do more.

Question 6: Does the staff receive incentives at the workplace in recognition of their accomplishment? What forms of incentives are usually awarded to the staff?

Manpower issues: Putting right number of people, right kind of

people at the right place, right time, doing the right things for which they are suited for the achievement of goals of the organization is very important.

Question 7: Do you think manpower is an issue at your workplace? If yes, then what are some of the problems you encountered regarding manpower?

Motivating and demotivating factors: Motivation is one of the factors that influence productivity, and no motivation will lead to poor staff performance.

Question 8: What are some of the motivating and demotivating factors that you often encounter in your workplace?

Physical Resources: Physical resources in health refer to the equipment, supplies, transport, library resources, infrastructure, financial support and alike. Supporting the staff by providing these necessary resources will increase their capacity to implement health care services.

Question 9: Do you think physical resources are an issue in your workplace?

- a) If it is an issue then what forms of most needed physical resources are always inadequate or unavailable that might affect the service delivery?
- b) Besides, what are the main reasons surrounding the unavailability of these resources?

Appendix 3: Interview Recording Sheet

Topic: An exploration into the Capacity Building Initiatives for the Clinical Nurses in Solomon Islands					
Location:					
Participant:					
Interviewer:		Note taker:			
Code	Notes	Observations (Non-verbal gestures)	Analysis		

Appendix 4: Consent Form

You have been asked to participate in an in-depth individual interview on capacity building for the clinical nurses in Solomon Islands. The study aims to gain an understanding of the challenges regarding the existing capacities of clinical nurses for effective service delivery. The information learned in the interview will increase our understanding of the capacity building needs of the clinical nurses and contribute efforts at maintaining and strengthening the required capacities within the health care services.

You can choose whether or not to participate in the interview and withdraw at any time unconditionally. Although the interview will be audio recorded, the rights of each individual nurse will be respected. Your responses will be confidential, and you will remain anonymous in the report. There are no right or wrong answers to the questions. We want to hear many different viewpoints and would like to hear from everyone who participates. We hope you can be honest even when your responses may not be in agreement with

other nurses.
I understand this information and agree to participate fully under the conditions as outlined
Subject's signature: Participation institution:
Date://

I the principal investigator /Associate Investigator have thoroughly explained the nature and objective of the study including any potential risks or benefits to the

subject.			
Signature :	Date :	/	/

Appendix 5: Participants Information Sheet

 $\textbf{Study Title:} \ \textbf{An exploration into the Capacity building initiatives of the clinical} \\$

nurses in Solomon Islands.

The background and purpose of this research:

- A. The purpose of this research: This study aims to gain an understanding of the challenges regarding the existing capacity building initiatives of the clinical nurses in Solomon Islands.
- B. Implementation Period: The research is going to be conducted in July-August 2015.
 - C. Participation institutions: National Referral Hospital, Honiara Urban Nursing Services and Guadalcanal Province.
 - D. The research fund was obtained from. This research received no specific funding from any funding agency.
 - E. Expected number of trial participation: Not applicable.

Procedures:

The study sample will be drawn from the clinical nurses who are currently serving in various health care facilities in Honiara including the National Referral Hospital, Honiara Urban Nursing Services, and the Guadalcanal Province. Approximately 10-15 participants will be included through purposive sampling who will then be interviewed individually. The instruments for data collection will be semi-structured in-depth interview using open ended questionnaire which will be audio recorded. Besides, observation and note taking will also be carried out during the interview. The whole interview session will last for about 60-90 minutes.

Potential side effects, risks, and treatment procedures:

- A. There are no anticipated risks and side effects associated with this study.
- B. If you feel uncomfortable in answering any questions in this interview you have the right to refuse to answer that question.

What benefits information you receive if you attend this study: Highlighting the challenges will lead to developing efforts at maintaining and strengthening the existing capacities within the health care system.

Medical Ethical Considerations of this research: Pior to conducting the study, the researcher will ensure full disclosure of the nature of the research to all the participants of the study. Each participant will be informed of the purpose of the study, any risks or the benefits involved. Your personal contribution and your rights will be explained and the opportunity to ask questions about the study will be provided. The consent outlines the purpose of the study, your right to voluntarily withdraw at any time during the study should you wish without penalty. Once you are satisfied with the requirements of the study, a consent form will be signed by you and the researcher, and a copy will be kept by each of you.

Confidentiality: Appropriate steps will be taken to maintain the privacy of all the participants, like the use of code numbers instead of using your real names. Your identity will be known only to the researcher who will keep names and workplace details in a secure place, separate from the transcripts. The transcribed interviews and field notes will be kept for a maximum period in accordance with the regulations of the Kaohsiung Medical University.

Usage of Achievements of the Research: The result of this research will be published in Taiwan health journal. The information collected will be of significantly important to Kaohsiung Medical University/Kaohsiung Medical University Chung-Ho Memorial Hospital to develop appropriate strategies in relation to capacity building for the clinical nurses. Besides, there will be no potential commercial profit gain from the study.

Damage Indemnification and Insurance: The damage or the adverse reaction caused by the occurrence of this study shall be our responsibility for the indemnification. However, the anticipated adverse reactions indicated in the informed consent form shall not be indemnified.

Subject's Rights:

A. If you have any questions regarding the nature of the study, comment on the rights as a subject, or have any query regarding the study, you can contact the Institutional Review Board of the Ministry of Health & Medical Services for further consultation. The telephone number is: (+677) 38257.

B. You are entitled to freely choose to participate in this study or not: You may cancel the consent at any time during the study voluntarily.

Who is organizing the research?

Trial Center: Kaohsiung Medical University Principal Investigator: Caleb Rale Mark.

Title: Masters in Nursing Student Kaohsiung Medical University Taiwan, ROC.

Phone number: Taiwan +866-0978418732

Phone number: Solomon Islands +677-747983478

Appendix 6: Research Approval Certificate

No: 15/27

National Health Research & Ethics Committee

Solomon Islands Ministry of Health & Medical Services