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A QUESTIONNAIRE-BASED STUDY TO ASSESS HEALTH CARE PROVIDERS' KNOWLEDGE, ATTITUDES, AND PRACTICES REGARDING ORAL HEALTH AND ORAL CARE FOR HOSPITALIZED PATIENTS AT ST GILES PSYCHIATRIC HOSPITAL IN FIJI

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ABSTRACT:

A mental disorder is a pattern of behavior or thought that causes severe suffering or impairs one's ability to function. Due to their inability to lead a regular life, mentally challenged people have been found to have poor oral health. The aim of this study was to assess health care providers' knowledge, attitudes, and practices regarding oral health care of hospitalized patients at St Giles Psychiatric Hospital in Fiji. A cross-sectional survey design was employed in which 29 health care providers completed a questionnaire that collected socio-demographic information, knowledge, attitude and practices regarding oral health maintenance and care of psychiatric patients. Results revealed that all participants (100%), had knowledge on oral health and oral hygiene practices. However, only 9 nurses (50%) and 5 ward orderlies (63%) reported practicing oral hygiene for in – patients. In fact, 5 (17%) respondents did not view oral hygiene as an important aspect in their patients' health. All participants (100%) reported unavailability of oral hygiene aids and absence of frequent dental visits, as a key barrier in the oral health care of patients. The results emphasize on the need for a formal training program for health care providers, and clear policies and guidelines about oral health care of hospitalized patients must be instituted.

Keywords: Fiji, Oral Health, Psychiatric Patients, Knowledge, Attitude, Practice.

INTRODUCTION:

Fiji is a South Pacific island nation made up of 332 islands, one-third of which is inhabited. It is located halfway between Vanuatu and the Kingdom of Tonga [1]. It had an estimated population of 884887 in 2017, an increase of 47616 from 2007 [2]. Fiji is a developing country with a developing health-care system [1], and its citizens, similar to other developing nations, suffer from a high rate of oral diseases [3]. There is no epidemiological data on the national prevalence or burden of mental disorders disease in Fiji [4]. However, a report highlighted that, underdeveloped or developing countries account for three-quarters of the worldwide burden of mental disease [5]. Thus, it could be assumed that Fiji has a high burden of mental disorders.

Studies have shown that inpatient psychiatric patients have high prevalence of poor oral hygiene, caries incidence and periodontal disease [6-8]. According to the American Psychiatric Association (APA) [9],

“A mental disorder is a syndrome characterized by clinically significant disturbance in an individual's cognition, emotion regulation, or behavior that reflects a dysfunction in the psychological, biological, or developmental processes underlying mental functioning. Mental disorders are usually associated with significant distress or disability in social, occupational, or other important activities”.

In general, patients admitted in hospitals where oral health care practices are inadequate, show

increased risk of developing oral pathologies [10]. Patients with psychiatric disorders who are admitted to psychiatric hospitals are also entitled to the same dental care needs as other patients [11]. This is because oral health care is a critical component of medical care for hospitalized patients [12]. Thus, necessitating the need for healthcare staff involved in delivering bedside care, to be made aware and educated in dental health measures, so as to prevent deterioration of oral and general health in admitted patients [11, 13].

In Fiji, St. Giles Psychiatric Hospital, the country's only psychiatric hospital, remains the focal point for mental health services [1]. It was built in 1884 as a single ward, to care for expatriates with mental disorders, and was known as “lunatic asylum” [14]. In 1935, the name was changed to St Giles Mental Asylum [14]. Currently, the institution comprises of a 136-bed inpatient facility, outpatient department, psychosocial rehabilitative, and community psychiatric services [15]. In 2010, 460 people were hospitalized as in - patients, with 249 being men and 211 being females [16]. Schizophrenia was found to be the most common mental disorder, accounting for 50.7% of admissions. Mood disorder was found to be the second most common mental disorder, accounting for 38% of admissions, while personality disorder and other conditions accounted for 2% and 9.3% of admissions, respectively [16]. Lastly, the average length of stay in St. Giles Psychiatric Hospital was 110

days, while the bed occupancy rate of psychiatric beds was 108.25 out of the 136 beds [16].

To the best of the authors' knowledge, there are no reported studies in the literature concerning mental health workers' knowledge, attitudes and practices regarding oral health and oral care for hospitalized patients in Fiji. In addition, oral health is neglected in contrast to overall health in the country [17]. A simple assessment of knowledge, attitudes and practices, may be the first step in identifying the areas of weakness. Therefore, the aim of this study was to assess health care providers' knowledge, attitudes, and practices regarding oral health and oral care of hospitalized patients at St Giles Psychiatric Hospital in Fiji.

METHODOLOGY:

Setting and Sample

The present study utilized a cross – sectional survey design in which the participants were the health care providers at St. Giles Psychiatric Hospital. Eligibility criteria included: nurses, student nurses, doctor on duty, dentist, and ward orderlies. According to data from 2013 [4], the institution has 5 physicians, 31 nurses, and 48 ward orderlies. Furthermore, approximately 15 student nurses were also rostered in the hospital, as part of their education and training program. Thus, of the potential 89 participants, 29 chose to take part in this survey, giving a response rate of 33%. A total of 11 (38%) participants were males and

18 (62%) were females. The health care providers in the study sample included: 18 (62%) nurses, 8 (28%) ward orderlies, 3 (10%) doctors. Ethnic distribution of healthcare providers encompassed, 22 (76%) *i- taukei*, and 7 (24%) Fijians of Indian descent. In terms of education, 26 (90%) of the respondents had tertiary level qualification, while 3 (10%) respondents had only achieved secondary level education.

Study Method

A self-designed pretested questionnaire was used to conduct this study. The questionnaire items were presented in English, and were reviewed by 2 consultants: one from dentistry and one from public health. The aim of the review was to ensure clarity and face validity of the questionnaire content. The questionnaire was divided into three sections. The first section was designed to collect sociodemographic data. The second section assessed the knowledge of the health care providers regarding oral health maintenance of hospitalized patients. Finally, the third section assessed their attitudes and practice toward the oral health care of psychiatric patients at the hospital. A copy of the questionnaire is presented in appendix 1.

Data Collection and Analysis

After obtaining ethics approval, the questionnaire was distributed to the healthcare providers at St Giles Psychiatric Hospital. A

brief explanation was presented on the cover page of the questionnaire mentioning the purpose of the study, confidentiality of information, anonymity, and the voluntary nature of participation. Once all data was collected it was entered and analyzed in Microsoft Excel and Epi Info Software.

Ethics Approval

This study was conducted in full accordance with the World Medical Association Declaration of Helsinki [18]. This study was conducted between May 2015 and July 2015. The study was approved by the Ministry of Health and Medical Services, School of Dentistry and Oral Health, Fiji National University, and St. Giles Psychiatric Hospital. Written informed consent was obtained from the study participants.

RESULTS AND DISCUSSION:

This study looked at the knowledge, attitudes, and practice of 29 health care providers at St Giles Psychiatric Hospital in Fiji, regarding oral health and oral care for hospitalized patients.

The results of the study showed that all participants (100%) knew that consumption of sugar in the presence of bacteria, and not having good oral hygiene leads to dental caries. In addition, all participants (100%) knew about fluoride and its role in protecting teeth, as well as the fact that cleaning the mouth with a soft tooth brush and fluoridated toothpaste is effective. When it comes to their information source, 15 (52%) participants reported that

they were aware of oral health care on their own, 7 (24%) respondents stated that they were informed by a dentist, 4 (14%) participants described getting information off the internet, while 3 (10%) participants stated that their knowledge on oral health care was from their friends. As a result, it is reasonable to state that the health care providers at St Giles Psychiatric Hospital have knowledge on oral health care. However, their source of information is not consistent and reliable. Thus, health care providers at St Giles Psychiatric Hospital must be formally trained and educated in oral health and oral health care practices. For instance, in a pilot study conducted by de Mey et al [19] which looked at the collaboration between oral hygienists and mental health nurses. The study [19] revealed that, after a brief educational intervention by oral health hygienists addressing themes such oral illnesses, oral health-related issues, and basic oral care, the knowledge of the participating nurses on oral health improved dramatically.

Moreover, results showed that all participants (100%) had knowledge of oral hygiene aids such as toothbrushes, dental floss, fluoridated toothpaste, as well as knowledge of dental pathologies. In addition, all participants (100%) reported that toothpaste and toothbrushes were readily available to patients, while mouth rinses and floss were not easily accessible. In St Giles Psychiatric Hospital, cleaning the patient's mouth is a responsibility shared by the ward orderlies and nurses. Out of the 18 nurses and

8 ward orderlies, only 9 nurses (50%) and 5 ward orderlies (63%), reported practicing oral hygiene for in – patients, while the remaining 9 nurses (50%) and 3 ward orderlies (37%) together with the 3 doctors, considered that it was not their responsibility and/ or had increased workload. In fact, 5 (17%) respondents did not view oral hygiene as an important aspect in their patients' health. Such negative perception and attitude is common towards oral health and oral health care of hospitalized patients. For instance, in a study conducted by Ashour [11], 148 (60%) nursing staff at a mental health hospital in Taif, Saudi Arabia, reported that cleaning the oral cavity of the patient was an unpleasant task, indicating a negative attitude towards the oral health care of hospitalized patients. Moreover, in a research performed by Hijji [20], nurses expressed similar perceived challenges to providing high-quality dental care in the wards. The author [20] further elaborates that, such barriers might range from nurses' personal dislike of providing oral health care to factors such as: a lack of time, understaffing, uncooperative patients, or a lack of materials and resources. Lastly, in a study conducted by Gillam et al [21], nurses agreed that oral care should be a high priority on the ward, however, when the ward became busy, oral care was often pushed to a lower priority.

Lastly, due to lack of availability, oral hygiene aids such as mouth rinses, dental floss, and interdental brushes were not included in the

patient's oral hygiene program. According to Griffiths et al [22], preventive programs must be adapted to the specific needs of patients with various diagnoses, prognoses, stages, and severity levels of mental illness. Maintaining dental health requires careful attention and the use of appropriate oral hygiene practices [22]. Moreover, all (100%) participants of the current study, described the absence of frequent dental visits as a key barrier in the oral health care of their patients. Similar findings were seen in a study conducted by Couatarmanach et al [23], whereby, participants agreed on the need for regular dental visits for psychiatric inpatients, however, such interventions were deemed difficult to establish.

This study provides valuable insight regarding the delivery of oral health care to patients in St Giles Psychiatric Hospital. The information presented in this research, could be used in the development and implementation of policies and guidelines that could improve oral health care of patients admitted in the institution.

CONCLUSION:

In conclusion this study assessed the knowledge, attitudes and practice of health care providers at St Giles Psychiatric Hospital, regarding oral health and oral care of hospitalized patients. The results emphasized on the need for a formal training program for health care providers about the importance of oral health care in their patients. Furthermore, oral hygiene aids must be made readily

available, and clear policies and guidelines about the oral health care of hospitalized patients must be instituted. Lastly, multidisciplinary approach and collaboration is needed from health care providers and oral health practitioners so that the patient's oral health status is maintained and does not deteriorate.

Limitations of the study:

There are limitations to the present study that should be mentioned. Firstly, although the sample size was acceptable, the response rate indicated that almost two thirds of the staff did not respond. As such, one cannot be sure that the results are representative of the entire health care providers at St Giles Psychiatric Hospital. Furthermore, this study was designed to provide a general overview and not an in-depth exploration on the knowledge, attitude and practices of health care providers at St Giles Psychiatric Hospital. Future research could be done to investigate any of these factors in greater detail.

Recommendations:

It is recommended that health care providers at St Giles Psychiatric Hospital receive oral health education in the form of Continuing Professional Development (CPD) from oral health practitioners like dentists, so that their knowledge and awareness on oral health is consistent and reliable. In addition, more emphasis on oral hygiene and oral health must

be done. For instance, incorporating oral health check – up as part of routine check – up or ward rounds. Furthermore, oral hygiene aids such as mouth rinses and floss must be readily available, and health care providers must be encouraged to integrate these in everyday oral hygiene practices. Finally, provisions must be made for patients to undergo regular dental check-ups, so that oral diseases can be detected early and treated by dentists, rather than waiting until the condition becomes severe/painful and tooth extraction becomes the only treatment option.

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Conflict of interest:

There are no conflicts of interest.

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APPENDIX 1: QUESTIONNAIRE

Topic: A Questionnaire – Based study to assess health care providers’ knowledge, attitudes, and practices regarding oral health and oral care for hospitalized patients at St Giles Psychiatric Hospital

General Information

Gender: M _____ F _____ (please tick)

Age: _____ Ethnicity: _____

Highest level of Education:

- Primary school
- Secondary School
- Tertiary school

Classification of the Health Care Providers:

- Ward orderlies
- Nurses
- Doctors
- Dentists
- Others
- Please specify _____

Health Care Providers Knowledge

How did you know about oral health care practice?

The dentist told me	
From the internet	
A friend told me	
I knew it myself	

1. What do you think causes tooth decay?
 - Sugar/sweets
 - Bacteria
 - Not tooth brushing
2. What is your understanding of fluoride on its impact on teeth?
 - No idea
 - No effect
 - Make teeth stronger
 - Make teeth discoloured
3. Do you think fluoride is good?
 - Yes
 - No
4. Do you think it is important that your patient cleans their mouth every day?
 - Yes
 - No
5. Is it good to use soft toothbrush to clean the teeth?
 - Yes
 - No
6. Do you agree that consumption of sugar causes caries?
 - Yes
 - No

7. Do you know about gum disease?
 - Yes
 - No
8. Do you think gum disease is part of oral health?
 - Yes
 - No
9. Do you know what floss is?
 - Yes
 - No

Practice and Attitude of Health Care Providers

10. What oral hygiene aids are available for use at your Institution?
 - toothbrush
 - toothpaste
 - mouth rinse
 - dental floss
 - interdental brushes
11. Do you clean their teeth?
 - Yes
 - No
 - If no, go to Q13.
12. How do you clean their mouth?
 - Finger with cloth and water
 - Rinsing with water alone
 - Finger with Water and Toothpaste
 - Toothbrush with Water & fluoridated toothpaste
 - Others, Please Specify.....
13. What are the reasons for not carrying out oral hygiene care for your patients? (Can tick more than 1 box)
 - No oral hygiene aids available
 - No time available, due to work overload
 - Do not see it as my role
 - Difficulty in carrying it out on patients
14. Do you consider oral health as important as the overall health of the patient?
 - Yes
 - No
15. When was the last time your patient visited a dentist?
 - Last 6 months
 - Last 12 months
 - 2 years or more
 - Never