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ROLE OF INSTITUTE OF HEALTH SCIENCES STUDENT VOLUNTEERISM IN THE NATION RESPONSE TO COVID- 19 PANDEMIC.

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ABSTRACT

The COVID-19 pandemic has resulted in unprecedented global disruption, affecting every aspect of life including education. For medical schools and health sciences institutions, the restrictions imposed by the pandemic have resulted in the cessation of onsite classes, suspension of clinical attachments and restructuring of the students' examination. Students of medicine and health sciences have always been considered an available resource in terms of volunteerism during a health crisis. Students at Pengiran Anak Puteri Rashidah Sa'adatul Bolkiah (PAPRSB) Institute of Health Sciences have been volunteering in both non-direct patient contact and direct patient contact activities. During the pandemic, most of these students' conventional university study and learning have been put on hold as a result of the restrictions. The need to continue learning is important, the students can therefore use the volunteerism during the pandemic as a learning opportunity looking to maintain and broaden their skills. It is however imperative that appropriate and adequate support, advice and training are provided to these students, not allowing them to undertake any activity beyond their level of competence, and with continuous supervision and adequate protection with personal protection equipment throughout their volunteerism during the pandemic.

Keywords: Academia, COVID-19, Medicine, Pandemic, Students, Volunteerism.

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Keywords: Academia, COVID-19, Medicine, Pandemic, Students, Volunteerism.

INTRODUCTION

The COVID-19 pandemic, caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), has resulted in unprecedented global disruption. It has affected every aspect of life including education. In response to the pandemic, governments around the world

have implemented protective and preventive measures such as closure of non-essential businesses and educational institutions, implementing travel restrictions and mandatory quarantine of cases, as social distancing is considered to be the most effective preventative strategy.¹ For medical schools and health sciences institutions, the restrictions imposed by the pandemic have resulted in the cessation of onsite classes, suspension of clinical attachments and restructuring of the students' examination.²

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In managing the COVID-19 pandemic, governments around the world have responded by increasing the number of acute hospital beds in existing hospitals, building new purpose built hospitals, prioritizing urgent and emergency work and redeploying clinical and support staff to critical areas. This has placed unprecedented burden on healthcare institutions and the already limited resources such as clinical staff.³ Many of these healthcare organizations have launched a number of initiatives to try and address these workforce challenges such as asking recently retired staff to return to clinical practice and offering final year medical students the opportunity to graduate early and join the hospital workforce.^{4,5}

During this pandemic, volunteering within the healthcare sector has been an important feature of the international and country response.⁶ Students studying in medical schools and health sciences institutions have always been considered an available resource in terms of volunteerism during a health crisis.^{7,8} Significant number of these students have stepped forward and volunteered to provide support in both clinical and non-clinical settings during the current COVID-19 pandemic.^{9,10}

The Pengiran Anak Puteri Rashidah Sa'adatul Bolkiah (PAPRSB) Institute of Health Sciences at Universiti Brunei Darussalam (UBD) offers Bachelor of Health Sciences programmes in five disciplines (Medicine, Dentistry, Pharmacy, Biomedical Sciences and Nursing and Midwifery), as well as Masters and graduate research studies programmes. For the Medicine and Dentistry programmes, the students undergo their first phase Bachelor of Health Sciences studies of three years at UBD, after which they are transferred to one of the partner medical schools overseas for their second phase of the clinical programme to complete their undergraduate Medicine and Dentistry pro-

grammes.

PAPRSB Institute of Health Sciences response to COVID-19 pandemic

Since the World Health Organization declared the COVID-19 outbreak a pandemic and the detection of the first COVID-19 case in Brunei Darussalam on 9 March 2020, UBD has implemented social distancing measures, including no onsite or campus teaching, banning of mass gatherings and cancellation of face-to-face group interactions.¹¹ The country then went through gradual phases of easing of restrictions. On August 7, 2021, the first cases of the community spread of the SARS-CoV-2 were detected after a record of 457 days without community infections since May 6, 2020. As a result of the new local COVID-19 cases, the government had once again tightened the restrictions, including the suspension of all onsite teaching activities at universities.

On 21 August 2021, in response to the government's demand in ramping up the national COVID-19 vaccination programme in order to achieve 80% vaccination coverage in the population in the current second wave of the pandemic in the country, a satellite vaccination centre in the PAPRSB Institute of Health Sciences, UBD was opened. The UBD vaccination centre was staffed by staff and student volunteers. The centre has been delivering up to 1,800 doses of vaccines a day.

Role of PAPRSB Students volunteerism during the COVID-19 pandemic

During the pandemic, the restrictions imposed by PAPRSB Institute of Health Sciences have resulted in the cessation of onsite classes and suspension of clinical attachments. In a typical normal week, 15 hours are dedicated to teaching sessions, 7 hours to self-directed learning sessions and 12 hours to clinical attachments for the Medicine pro-

gramme. During the pandemic and with the cessation of on-site sessions, medical students had to attend 8 hours of online lectures. For the rest of teaching and learning time, the students were involved in 16 to 24 hours of volunteering work per week, in both clinical and non-clinical settings in order to meet the demands of COVID-19 pandemic on the country's healthcare system.

A total of 132 students (34.2%) from PAPRSB Institute of Health Sciences had registered as volunteers during the pandemic. These included 44% of the students from the Medicine programme, 41.7% from the Nursing programme, 41.3% from Pharmacy programme, 16.7% from the Biomedical Science programme and 13.3% from the Dentistry programme. These students have volunteered in the following activities:

Ministry of Health Helpline

The COVID-19 Health Advice Line was introduced on 5 February 2020. This telephone line is operational 24 hours a day to provide the public with up-to-date information and advice on COVID-19. Students from the Pharmacy, Biomedical Sciences and Nursing programmes have volunteered to work at call stations to provide the public with advice ranging from verification of the contact tracing app users, updates on the pandemic situation, information of COVID-19 swab tests, flu clinics and information relating to the national vaccination programme. The helpline receives more than 1,000 telephone calls, 22,000 text messages, 5,000 telegrams and 100 e-mails a day.

Flu Clinics

Final year students from the Nursing programme volunteered their services at Flu Clinics in various primary health centres around the country. Patients with flu-like symptoms were triaged separately by nurses and were isolated before consultations and investigations were carried out.

Ministry of Health Contact Tracing

Contact tracing is an essential element of public health response to curtailing infectious disease outbreaks, such as COVID-19. With contact tracing, the relevant authority can trace and break the chains of transmission of COVID-19 in the event of an outbreak of infection. The Brunei Government rolled out its contact tracing app on 14 May 2020. Students from the Nursing programme who volunteered for this activity were responsible for tracing and contacting the close contacts of individuals who were found to be positive for COVID-19. The contacts were asked to attend swab centres for testing and given information on self-isolation or quarantine requirements.

Swabbing for COVID-19 RT-PCR Tests

Testing plays a key role in the efforts to contain and mitigate the COVID-19 pandemic by identifying infected individuals to help prevent further person-to-person transmission of the infection. A nose or a throat swab is taken if the individual has signs of symptoms suggestive of COVID-19, if the individual has lived or has recently traveled to an area where the transmission of COVID-19 is high or if the individual has been in close contact with individual suspected or confirmed to have COVID-19. Students who volunteered for this activity underwent training on the donning and doffing of the personal protection equipment (PPE) and on the techniques of swabbing for COVID-19 Reverse Transcription-Polymerase Chain Reaction (RT-PCR) testing.

National COVID-19 vaccination programme

The Brunei national COVID-19 vaccination programme was rolled out on 3 April 2021. The vaccine distribution strategy was divided into three phases, with phase one vaccination for frontliners, senior citizens and students intending to study abroad, phase two for child care centre staffs, teachers and adults with

comorbidities, and phase three for the general public. On 8 November 2021, the country rolled out its COVID-19 vaccination programme for the 12 – 17 age group. Booster shots for individuals aged 18 and above have also started on 17 December 2021. Students from the Medicine, Dentistry and Nursing programmes have volunteered to assist in the national vaccination programme. All the students were briefed on the programme and their roles, they were provided with training on PPE, vaccine handling and administration.

National Isolation Centre

Final year students from the Nursing programme have volunteered in the National Isolation Centre where confirmed positive and symptomatic COVID-19 patients were being treated.

Observation and treatment room in UBD vaccination centre

Students from the Nursing programme who have obtained Diploma in Health Science (Paramedic) were deployed in the observation and treatment room in the UBD vaccination centre. Their role was to work closely with the doctors on duty to provide care to individuals who experienced symptoms immediately after receiving the vaccinations.

DISCUSSION

Why do people decide to be volunteers and serve others in times of a crisis? Clary et al., who studied volunteers of different areas identified six different motivation functions in volunteers; 1) value (the opportunity to express altruism and humanitarian values), 2) understanding (the opportunity to learn something new or to develop new skills), 3) social (the opportunity to establish relationships), 4) career (the opportunity to further one's career prospects), 5) protective (to escape from negative feelings) and 6) enhancement (the opportunities to add to one's self-esteem).¹²

There is an assumption that medicine and health sciences students are an available resource in terms of volunteerism during a crisis. However, some have questioned this notion, as these students engaging in such work without sufficient preparation are susceptible to moral trauma and adverse health outcomes.⁷ In addition, there may be uncertainty about the appropriate roles of these student volunteers.¹³ It is also believed that these students, in the absence of requisite knowledge and preparation, may introduce unnecessary risk for patients, clinicians and themselves. These students can act as vectors for viral transmission, consume PPE and place an additional burden on clinicians.¹³

A 2019 survey conducted at the National University of Ireland, Galway, reported that 59% of participants were willing to volunteer in the event of a pandemic, and that most participants agreed that healthcare professionals have a moral obligation to volunteer in a pandemic with 81% believing that students should do the same.¹⁴ The participation of student volunteers in clinical care has been varied across institutions. While some universities have prohibited any patient interaction, others have assigned students for hospital-based roles or recruited them as early graduated frontline workers.^{5,13} A study from Poland reported that the majority of student volunteers participated in administrative work (39.8%), a third assisted in emergency rooms (33.3%), while others were involved in medical history taking from patients (21.3%) and assisted in medical procedures on the ward (18%). A small number helped in making supplies of PPE and provided telephone advice (7%).¹⁵

Most students have found the volunteering experience valuable and that it had improved their communications skills, provided them with insight into working in the healthcare sector and acquired greater understanding of working with other healthcare

professionals in the real world. The students also expressed feelings of being valued and appreciated by the public and other healthcare professionals. Our own students were volunteering in both non-direct patient contact and direct patient contact activities. Non-direct contact patient activities were managing the telephone helpline and contact tracing. As for direct patient contact activities, the students were involved in patient nasopharyngeal swabbing, administering vaccines to the public and providing nursing care in flu clinics and in both Nation isolation centre as well as Community isolation centres.

Studies have reported that for non-direct patient contact activities, health sciences students have been volunteering to train other healthcare workers in PPE fitting^{16,17} contacting older adults and residents of independent and assisted living by phone in order to reduce their social isolation¹⁸ and making calls to antepartum and postpartum patients scheduled for telehealth visits.¹⁹ As for patient contact clinical activities, student volunteers were recruited as temporary residents, ventilator therapy assistants and nursing care assistants.^{9,20}

During the pandemic, most of the medicine and health sciences students' conventional university study and learning have been put on hold as a result of the restrictions. The need to continue learning is important, the students can therefore use the volunteerism during the pandemic as a learning opportunity looking to maintain and broaden their skills. One way of volunteering that may benefit health sciences students is through the service-learning model. This is a method of learning whereby the students are allowed to perform, reflect and grow in their professional and personal roles and identities which intersect with their academic curriculum, and the students are allowed to engage in inter-professional collaboration whenever possible to promote learning with, from and

about each other while serving their communities.²⁰

The students volunteering during the pandemic have exhibited significant professionalism with commendable resolve, altruism and dedication. Their contributions are often recognized and appreciated by healthcare staffs and the general public. The students themselves had reflected on the enormous value of actually working to support healthcare professionals and had also benefited from understanding the roles of other healthcare professionals.¹⁶ However, lest we forget, these students are not fully trained or qualified healthcare professionals and are working in often unfamiliar environments, unsure about their own roles and the future development of the pandemic. Medicine and health sciences student volunteers offer a vital asset in the combat against COVID-19 pandemic. It is therefore imperative that we provide appropriate and adequate support, advice and training, not allowing them to undertake any activity beyond their level of competence, and with continuous supervision and adequate protection with PPE to these students throughout their volunteerism during the pandemic. At PAPRSB Institution of Health, student volunteers are provided with adequate training and constant supervision, and they receive daily briefings. The students' welfare remains a top priority for the university, all of them undergo regular interval nasopharyngeal RT-PCR swab and testing as well as self administered COVID-19 Antigen Rapid Test, according to the Healthcare Workers Surveillance Guidelines provided by Ministry of Health, Brunei Darussalam. University mental health counselor are constantly available for all students.

Our students did not receive any monetary rewards for volunteering. However, each of the student volunteer was awarded a university official letter of appreciation recognizing their contribution in the country's re-

response to the pandemic. In terms of the assessment of the cost-benefit ratio, this has been a worthwhile activity during the pandemic; a time where there is a shortage of manpower in the healthcare sector and health sciences students naturally become a ready and available resource in terms of volunteerism during a health crisis.

CONCLUSION

It is hoped that with all the support, advice and training provided to these medicine and health sciences students while volunteering during the pandemic, it will result in next generation of healthcare professionals that enter profession with plenty of awareness and background about occupational risks, and an understanding of the roles of other healthcare professional working in a multidisciplinary profession.

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CONFLICTS OF INTEREST STATEMENT

The authors have no conflicts of interest to declare

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