

Ukrainian Medical Students Visited Juntendo Shizuoka Hospital to Learn Emergency Medicine

Youichi Yanagawa^{1*}, Hiromichi Ohsaka², Kouhei Ishikawa³

Department of Acute Critical Care Medicine, Shizuoka Hospital, Juntendo University, Izunokuni City, Shizuoka, Japan

*Corresponding author: yyanaga@juntendo.ac.jp

Received December 25, 2023; Revised January 28, 2024; Accepted February 04, 2024

Abstract Present manuscript described a case report of medical education humanitarian aid provided Ukrainian medical students visiting Juntendo Shizuoka Hospital. Three female Ukrainian medical students visited Juntendo Shizuoka Hospital from August 8 to 12, 2022. The week's schedule was as follows: 1) the students participated in a morning conference, where they encountered new outpatients who were being treated by the physician on duty and discussed the treatment plan for inpatients; 2) the students participated in rounds for the inpatients; 3) the students visited the emergency room (ER) to assist in clinical practice for a variety of outpatients; and 4) the students participated in daily mini-lectures. Through their visit to our department, the students learned of the importance of clinical programs and being team members, how to behave as part of a team, how to deliver quality care for critically ill patients, how to assess the severity of a patient's condition and how to triage patients in the ER. Afterward, two out of the three students obtained their medical licenses and have begun working as physicians in Ukraine and Japan. Based on the university motto "Japanese term [Jin] – I exist as you exist," Juntendo University will continue to support the leaders of tomorrow in their ongoing studies.

Keywords: Ukraine, medical students, education

Cite This Article: Youichi Yanagawa, Hiromichi Ohsaka, and Kouhei Ishikawa, "Ukrainian Medical Students Visited Juntendo Shizuoka Hospital to Learn Emergency Medicine." *American Journal of Educational Research*, vol. 12, no. 2 (2024): 35-37. doi: 10.12691/education-12-2-1.

1. Introduction

In Ukraine, Russian airstrikes have destroyed hospitals and educational facilities and taken away opportunities for students to learn, devastatingly impacting the future of students, residents, and researchers. [1] To help those who will build the future of Ukraine pursue their education despite these immense challenges [2,3], Juntendo University, the oldest medical university in Japan and located in Tokyo, has decided to accept and provide educational and research opportunities to Ukrainian students, medical residents, and researchers who are unable to continue their education and research due to the military invasion of Ukraine by Russia, implementing several measures to temporarily accept Ukrainian students, residents, and researchers for enrollment. [4,5]

As of April 25, 2022, a total of 15 Ukrainian medical students, residents, and researchers were accepted to Juntendo University. Among them, three medical students visited Juntendo Shizuoka Hospital (<https://www.hosp-shizuoka.juntendo.ac.jp/en/>) to learn about emergency medicine. This hospital receives many severely ill or traumatized patients from eastern Shizuoka prefecture and is a base hospital of a physician-staffed helicopter. [6]

We herein introduced these students' experience at Juntendo Shizuoka Hospital.

2. Case report

Three female Ukrainian medical students visited Juntendo Shizuoka Hospital from August 8 to 12, 2022.

We first held greetings and self-introductions between staff members from the Department of Acute Critical Care Medicine and the medical students from Ukraine. The students then attended a morning conference concerning patients in the emergency room (ER), intensive-care unit and general wards and discussed their diagnoses and treatments in English.

On their first day, the students took part in an interview with a local Shizuoka newspaper. [7] After the interview, they attended morning rounds in the intensive-care unit and general ward. They then went on a tour of Shizuoka Hospital and visited a physician-staffed helicopter (Figure 1). After finishing the morning conference and rounds, they took part in clinical practice in the ER.

The Ukrainian medical students at the heliport of Juntendo Shizuoka Hospital. The students (left three individuals) checked out the physician-staffed helicopter, known as a "doctor helicopter" in Japan.

The week's schedule was as follows: 1) the students participated in a morning conference, where they encountered new outpatients who were being treated by

the physician on duty and discussed the treatment plan for inpatients; 2) the students participated in rounds for the inpatients; 3) the students visited the ER to assist in clinical practice for a variety of outpatients; and 4) the students participated in daily mini-lectures (vital signs, how to read an electrocardiogram, how to read a traumatic pan scan of computed tomography, and the Japanese system of emergency medicine, including an encounter with a physician-staffed helicopter).



Figure 1.

The details of the patients the students encountered at Juntendo Shizuoka Hospital are shown in [Table 1](#). Through their participation in clinical practice in the ER, the students learned skills for checking vital signs using three senses (sight, sound, touch) and monitoring; how to perform a 12-lead electrocardiogram, physical examinations, and focus assessment sonography for trauma; and how to secure a venous route, insert a nasogastric tube, insert a urethral catheter, perform arterial blood gas sampling, quickly read radiographic images, perform drug infusion, irrigate wounds and diagnose and carry out the initial treatment of a patient. Through their visit to our department, the students learned of the importance of clinical programs and being team members, how to behave as part of a team, how to deliver quality care for critically ill patients, how to assess the severity of a patient's condition and how to triage patients in the ER

One evening, we held a ceremonial dinner to build intimacy and deepen friendships. The students were taken sightseeing by a staff member to historical areas around Juntendo Shizuoka Hospital on holiday. Unfortunately, when Typhoon #8 hit Izu peninsula directly, the curriculum had to be ended early on August 12, 2022, to allow the students to return to Tokyo for evacuation.

The students left comments after finishing their training at our department, stating that they found the department of Acute Critical Care Medicine in Juntendo Shizuoka Hospital very interesting and vitally important and that they had enjoyed their visit. Afterward, two out of the three students obtained their medical licenses and have begun working as physicians in Ukraine and Japan.

Table 1. Details of patients Ukrainian medical students encountered at Juntendo Shizuoka Hospital

Diagnosis	Number
Outpatient multiple severe trauma	2
head trauma (fracture or subarachnoid hemorrhaging)	2
chest trauma (pneumothorax or sternal fracture)	2
lumbar contusion	1
decompression sickness	1
heat stroke	2
vertigo	1
endogenous cardiac arrest	1
septic shock with COVID-19	1
electrolyte imbalance	2
spinal cord injury	1
Inpatient→severe asthma attack after COVID-19 vaccination requiring mechanical ventilation	1
septic shock in patient with end-stage multiple myeloma and COVID-19 requiring mechanical ventilation	1
septic shock with multiple organ failure due to severe soft tissue infection requiring mechanical ventilation and amputation of leg	1
septic shock with hypothermia requiring mechanical ventilation	1
cerebral infarction, osteomyelitis and recurrent cholecystitis	1
mountain sickness with pulmonary edema and hypoxic liver dysfunction	1
acute respiratory distress syndrome and hypoxic brain injury due to drowning	1
heat stroke	1
cervical, sternal, multiple rib fractures with Takotsubo cardiomyopathy and heart failure requiring mechanical ventilation	1
cervical spinal cord injury requiring mechanical ventilation and internal fixation	1
spinal fractures	4
multiple trauma (head, chest, pelvis, extremity)	3
chest trauma (lung contusion, pneumothorax or rib fracture)	3
pelvic fracture	1
laryngeal chemical burn with aspiration pneumonia	1

3. Discussion

Present manuscript described a case report of medical education humanitarian aid provided Ukrainian medical students visiting Japan as refugees. Displaced Ukrainian medical students may also serve in other relatively safe environments, aiding in relief efforts in their neighboring nations of Romania, Poland, Hungary and United Kingdom, to which many refugees have fled. [1,8] However, to our knowledge, this is the second reports have described the medical education available to refugee students in such countries, and how to provide medical

education to refugees from foreign countries as humanitarian aid. [8] To stand up for peace and follow the principles of humanity, neutrality, and impartiality in both work and communication, Juntendo University will continue to support the leaders of tomorrow in their ongoing studies based on the university motto “Japanese term [Jin] (affection, befriend and/or thoughtfulness) – I exist as you exist.” [4]

Several limitations associated with the present study warrant mention. First, we only described just one sample of education for the visiting Ukrainian medical students at Juntendo Shizuoka hospital. Juntendo University has previously provided numerous educational programs for various visiting medical students education at Juntendo hospital in Tokyo. [9] Second, since it is unclear at present when the war with Russia will be over, a formal path that will allow these Ukrainian medical students to become doctors has not yet been established. Finally, many of these medical students are now displaced refugees looking to escape to Western Europe, Japan, or their country of origin in the case of immigrants to Ukraine. However, even if they should escape the ongoing conflict, the question remains as to how many of these students will complete their medical education and cope with the trauma of political unrest. [1] A proper evaluation of the fruits of our efforts will require further follow-up of the medical education of these Ukrainian medical students, until they are able to become professional doctors.

4. Conclusion

Based on the university motto “Japanese term [Jin] (affection, befriend and/or thoughtfulness) – I exist as you exist,” Juntendo University will continue to support the leaders of tomorrow in their ongoing studies. [2]

Declarations

Ethics approval and consent to participate

The protocol of this retrospective study was approved by our institutional review board, and examinations were conducted according to the standards of good clinical practice and the Declaration of Helsinki. All consents from participants were obtained.

Consent for Publication

All authors endorse the data and conclusions.

Competing Interests

All authors do not have competing interests to declare.

Funding

This work was supported in part by a Grant-in-Aid for Special Research in Subsidies for ordinary expenses of private schools from The Promotion and Mutual Aid Corporation for Private Schools of Japan.

Authors' contributions

All authors have made substantive contributions to the study.

(Youichi Yanagawa wrote the manuscript. Hiromichi Ohsaka and Kouhei Ishikawa edited the manuscript.)

ACKNOWLEDGEMENTS

We are very honored to have been able to welcome the Ukrainian medical students.

Declarations

No datasets were generated or analyzed during the current study.

References

- [1] Srichawla BS, Khazeei Tabari MA, Gāman MA, Munoz-Valencia A, Bonilla-Escobar FJ. War on Ukraine: Impact on Ukrainian Medical Students. *Int J Med Stud.* 2022 Jan-Mar; 10(1): 5-17.
- [2] Goncharuk-Khomyn M, Kaliy V, Pohorilyak R, Cavalcanti A, Keniuk A, Yavuz Y, Olena B. Impact of war on foreign students' satisfaction with quality of dental and medical education in Ukraine. *Braz Oral Res.* 2023 Mar 31; 37: e026.
- [3] Armitage R, Pavlenko M. Medical education and war in Ukraine. *Br J Gen Pract.* 2022 Jul 28; 72(721): 386.
- [4] Juntendo News. Acceptance of Students, Medical Residents, and Researchers from Ukraine. Apr. 25 MON, 2022 <https://en.juntendo.ac.jp/news/nid00001419.html>.
- [5] Ogawa H. Pedigree record of Juntendo University. *Juntendo Med J* 2005; 51: 264-271. In Japanese.
- [6] Omori K, Ohsaka H, Ishikawa K, Obinata M, Oode Y, Kondo A, Kanda A, Fujii M, Sakurada M, Nakao Y, Suwa T, Okamoto K, Yanagawa Y. Introduction of a physician-staffed helicopter emergency medical service in eastern Shizuoka prefecture in Japan. *Air Med J.* 2014 Nov-Dec; 33(6): 292-5.
- [7] Ozawa Y. Ukrainian medical students learn basic knowledge of emergency medicine at Juntendo Shizuoka Hospital. *Shizuoka Shinbun* 2022; Aug 9. In Japanese <https://www.at-s.com/news/article/shizuoka/1105636.html>.
- [8] Hodkinson J, Lillicrap M, Wilkinson P, Bevan S, Shenheliia T, Chupina V, Fuld J. Medical education through an invasion: insights from an elective programme for Ukrainian medical students at the University of Cambridge. *Front Med (Lausanne).* 2023; 10: 1211526.
- [9] Juntendo University. Attempt by Juntendo University to educate and collaborate medical students, residents and researcher from Ukraine. *Good Health Journal.* 2022; Aug 2. In Japanese <https://goodhealth.juntendo.ac.jp/pickup/000286.html>.

