

# Introduction of lectures on COVID-19 in international nursing curriculum

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## Abstract

Infection is a major area of focus in the fields of international nursing or international medicine. The recently emerged COVID-19 (coronavirus infectious disease 2019) pandemic has revealed critical problems in healthcare systems as well as serious social, political, and financial issues related to healthcare. Based on the supposition that healthcare providers can learn a great deal from the ongoing issues with COVID-19, we have COVID-19 related materials in our 2020 international nursing curriculum lectures. We hoped the adjustment would encourage students to learn from dynamic real world events. Indeed, in our experience and based on student feedback, we found that the educational supplement enhanced participating students' knowledge about COVID-19, with some students expressing interest in following up with this international issue. The educational activities included in the presently presented supplemental curriculum may add value to international healthcare education.

## Introduction

Coronavirus infectious disease 2019 (COVID-19), caused by the zoonotic virus SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2), emerged in late 2019 in China before spreading rapidly worldwide. The World Health Organization (WHO, 2020) declared the COVID-19 outbreak a global health emergency on January 30, 2020, and then recognized officially that the outbreak had become a global pandemic on March 11, 2020. Despite various efforts to control infection by governments and international associations, COVID-19

has remained uncontrolled in many countries through late 2020.

Although SARS-CoV-2 infection remains a major problem in some areas, the focus of attention in international medicine fields, including international nursing, has been shifting from infectious diseases to non-infectious conditions, including psychiatric problems and lifestyle-associated diseases. Indeed the COVID-19 pandemic has exposed a great many healthcare-related social, political, and financial issues in addition to exposing limitations of healthcare systems per se. The issues revealed by the COVID-19 pandemic can be instructive for healthcare providers and students studying to become nurses and doctors. We have included COVID-19 lectures in our international nursing curriculum with the aim of encouraging students to learn from dynamic international conditions relevant to infectious disease management.

## International nursing curriculum

The Matsuyama School of Nursing at the University of Human Environments in Japan has an international nursing curriculum integrated within its four-year degree program. In most nursing degree programs, international nursing is taught in a series of about 15 lectures administered to students over one or two program years, though some nursing programs have special departments for international nursing.

The Matsuyama School of Nursing has a unique policy of teaching international nursing in all four years of its nursing degree programs. During the first two program years, all students attend 15 lectures that are each 90 minutes long. During the third and fourth program years, selected students continue to attend international

nursing lectures, including 15 lectures in year three and 8 lectures in year four. All of the international nursing lectures at Matsuyama School of Nursing are currently provided by the authors of this paper (NT and YO).

In the first term of 2020, second and third year students attended international nursing lectures. The contents of the international nursing curriculum lectures for program years two and three are summarized in Table 1. Third year students participating in continued international nursing instruction wherein the lectures

were combined with small group discussion of the lecture topics. Although the lecture syllabi had already been finalized for the year, we added discussions of issues related to COVID-19 to the lecture series contents, especially in lectures provided by the physician instructor (YO). We decided to include COVID-19 pandemic issues because they relate to international nursing and represent examples of the real-life dynamics of topics covered in the lectures.

Table 1. International Nursing Curriculum

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**Program year two**

1. Basic concepts of global health 1: Health and globalization
  2. Basic concepts of global health 2: Healthcare system
  3. Basic concepts of global health 3: Sustainable developmental goals (SDGs)
  4. Global healthcare research 1: Public health
  5. Global healthcare research 2: Human resource and social aspects
  6. Global healthcare practice 1: Smoking, disasters, and traditional medicine
  7. Global healthcare practice 2: Infections
  8. Global health in different countries 1: Africa and the Middle East
  9. Global health in different countries 2: Asia and South America
  10. Global health activities 1: Project management
  11. Global health activities 2: Reproductive health
  12. Global health activities 3: Mental health
  13. Global health related fields 1: Economy, society, and gender
  14. Global health related fields 2: Legal issues
  15. Global nursing
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**Program year three**

1. Practical issues in global nursing
  2. Background in world health problems 1: Poverty and peace keeping activity
  3. Background in world health problems 2: Gender and female health problems
  4. Background in world health problems 3: Population and aging
  5. Background in world health problems 4: Child health and education
  6. Background in world health problems 5: Cultural issues and immigrants
  7. World health problems 1: Mental health in developing countries
  8. World health problems 2: Infectious diseases
  9. World health problems 3: Non-communicable diseases (NCDs)
  10. International health activities 1: Environments
  11. International health activities 2: Foreign residents in Japan
  12. Human resources in international nursing 1: JICA and JOCV
  13. Human resources in international nursing 2: Carrier design
  14. International collaboration 1: Maternity health and nursing education
  15. International collaboration 2: Working outside of Japan
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## Lectures on COVID-19

COVID-19 issues were addressed in three of the lectures attended by our second-year students (N = 67): lecture 7 (Global health care practice: Infections); lecture 8 (Global health in different countries 1: Africa and the Middle East); and lecture 9 (Global health in different countries 2: Asia and South America). These lectures focused on COVID-19 as an emergent infectious disease and were organized to address four major conceptual aims. Firstly, we aimed to teach basic knowledge about infectious diseases, as scheduled in the syllabus, with the addition of COVID-19 as an updated example of a newly developed infection. Secondly, we aimed to provide up-to-date information about the emerging pandemic to help students understand how COVID-19 affects people and healthcare systems worldwide. Thirdly, we aimed to present pandemic-related issues in a problem-oriented manner, including how cultural differences affect people's behavior in relation to COVID-19, and how political issues and conflicts affect its spread. Fourthly, we aimed to examine how the care of patients with COVID-19 is affected by the particular characteristics of medical systems in different countries.

Basic infectious disease concepts, including what defines an outbreak, epidemic, pandemic, and endemic status, were taught based on a textbook (Murakami, 2013). Topics related to COVID-19 covered principally in the latter portions of lectures included: 1) SARS-CoV-2 viral properties; 2) world-wide infection expansion; 3) the explosion of infection in Western countries; 4) the process of being classified as a pandemic; 5) criticisms of the WHO; 6) political actions related to COVID-19 in China; 7) lockdown as a prophylactic public health measure in different cultures; 8) poverty and COVID-19, with a focus on the situation in Africa; and 9) problems caused by co-

occurrence with other infectious diseases in developing countries. Ten videos derived mainly from news programs related to the above topics were presented in lectures (Table 2), with an emphasis on understanding how the situation evolved over time. We organized these videos with the aim of facilitating students' understanding how COVID-19 spread worldwide and how people have reacted to the pandemic. In teaching the above topics, the lecturers focused on discussing international problems related to healthcare, both in developed countries and in developing countries. Issues discussed in detail included the WHO's functions and limitations, the importance and challenges of international collaboration, how cultural backgrounds underlie different attitudes toward infection, and the burden of poverty in the context of infection control. Specifically, we addressed how the WHO acted in response to COVID-19, including the insufficiency of its measures with respect to preventing early spread of the disease, an apparently delayed recognition of the pandemic, the dissatisfaction of many countries with its actions, and the USA's declaration that it was leaving the WHO. We examined how the WHO contributes to the health of people in the world as well as how the WHO may be influenced by politics and may be inadequate in these kinds of urgent emerging events.

After the lectures, students were requested to fill in an attendance card with a brief free-response comment about the lecture. In these student comments, 53% of students indicated that they were impressed with the COVID-19 lesson and/or that their knowledge about COVID-19 was enhanced. Additionally, 7% of the students expressed that they would be interested in following up with this international issue. Some students told the lecturers directly that the videos about ongoing COVID-19 issues were much more impressionable than lessons based on the textbook.

Table 2. Contents of videos used in lectures.

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COVID-19 deaths in Italy (News program)
WHO declaration of pandemic (News program)
President Trump stops the funding for WHO (News program)
President Trump declared withdrawal from WHO (News program)
Collapse of the mask "bubble" in China (News program)
COVID-19 and poverty; worst combination (News program)
COVID-19 in Africa; report by a Japanese (News program)
Spreading anxiety on COVID-19 in Africa (News program)
Concerns about COVID-19 in Africa (YouTube by a freelance doctor)
Movie trailer "Outbreak" (Movie company)

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For the third year students (N = 18), COVID-19 information was taught in one lecture, namely lecture 8 (World health problems: Infectious diseases). In the first portion of the lecture, information about COVID-19 was presented together with information about three other major infectious diseases affecting populations in the world (AIDS, malaria, and tuberculosis) based principally on the contents of the textbook (Date, 2016). In the latter part of the lecture, the class was broken up into small groups to discuss the threat of emerging infectious diseases and each group presented their opinions to the class. Small-group discussion was prompted with the following question: “How can the spread of newly developed infections be prevented and who can work on this problem”. Students commented on the importance of vaccine and therapeutic development, the need to keep vigilant attention on contagious infections, and how individuals’ can prevent contagion with their behavior. After the lecture, students were asked to write a short comment about one of the diseases discussed (AIDS, malaria, tuberculosis, or COVID-19). Remarkably, 89% of students commented on COVID-19, showing widespread concern about the ongoing pandemic. Some of the students told the lecturer that active learning about COVID-19 made them think more deeply about health issues around the world.

## Discussion

Nursing and medical education has been disrupted in the trying times of COVID-19. On the other hand, learning from real world experiences with COVID-19 may provide a unique educational opportunity, especially in relation to international issues.

Current challenges facing nursing and medical education have been reported and reviewed (Jowsey, 2020; Dedeilia, 2020; Morin, 2020; Ahmed, 2020). Many authors have discussed innovations and challenges in education (Sahi, 2020; Roses, 2020; Sandhu, 2020; Singh, 2020). Notably, Cleland (2020) addressed sociomateriality in healthcare education.

Although we did not obtain statistical data about our educational trial of incorporating COVID-19 information in nursing education, students provided favorable responses to the trial. A majority of second year students used their free-response comment cards to express their being impressed with the lesson and/or to share that the lesson enhanced their knowledge about COVID-19

substantially, and some expressed interest in following up with the issue. In the third year lecture, nearly 90% of students commented on COVID-19.

International nursing textbooks emphasize that the primary interest of international nursing is moving from infectious diseases to lifestyle-related diseases and psychiatric disorders. In this context, the COVID-19 pandemic reminds us that paying vigilant attention to infectious diseases, especially emergent ones, is greatly important. There is a continuous need for nursing educators to remain up-to-date on international issues, especially on issues related to international medicine and nursing. It is our view that these kinds of educational activities not only enhance students’ knowledge about infectious diseases, but also stimulate their interest in international healthcare issues.

## Conclusion

Current topics related to COVID-19 were introduced into our international nursing curriculum in 2020, and their introduction proved to be an effective way of attracting the attention of nursing school students. Moreover, lectures related to COVID-19 may enhance students interest in viewing international news sources. Based on our experience, we believe that flexible planning of lectures such that their contents are responsive to current world circumstances is an effective educational approach, particularly in the field of international nursing.

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