

Professional Leave Report Cover Sheet

Name: Mohammad Rahman

Department: Public Health

College: Health & Human Services

Leave taken: ☒ Sabbatical ☐ Difference in Pay ☐ Professional Leave without Pay

Time Period: ☒ Fall 2021

☐ Spring

☐ Academic Year

☐ Other

Your report will be sent to your Dean for your PAF and to the Library Archives.

From: Mohammad A Rahman
Professor
Department of Public Health, Fresno State

To: Denise Seabert
Dean, College of Health and Human Services
Fresno State

Cc: Academic Affairs, Fresno State

Re: Sabbatical Report (fall 2021 semester)

I write to report on the work I accomplished during my sabbatical taken during the fall 2021 semester. I successfully completed the sabbatical engagement and accomplished the goals and objectives mentioned in my sabbatical plan.

Please find attached the sabbatical report that describes my accomplishments during my sabbatical leave during the fall 2021 semester.

Thank you.

Sincerely yours,

A handwritten signature in blue ink, appearing to read 'M. Rahman', with a long horizontal flourish extending to the right.

Mohammad A Rahman, Ph.D.
Associate Professor
Department of Public Health
Fresno State
Email: mrahman@csufresno.edu

Sabbatical Report

I want to report on the work that I have accomplished during my sabbatical leave in the fall 2021 semester. During this time, I was able to accomplish the tasks that I planned to do. I set out to complete the following research activities during my sabbatical leave.

1. Write a research article on Covid-19 pandemic and its psychological impact on healthcare providers in the Central Valley of California
2. Write a research article on telehealth readiness of healthcare providers in the Central Valley of California
3. Prepare a grant application on telehealth for funding a Telehealth Resource Center at Fresno State.

1. The accomplishments of the leave in relation to the goals of the original proposal:

a. *Research Project on Covid-19 pandemic and its psychological impact on healthcare providers in the Central Valley of California.*

I finished writing a research article titled: **“Impact of COVID-19 Pandemic on Healthcare Professionals in the Central Valley, California 2020-21”**

Summary: The coronavirus disease 2019 (Covid-19) pandemic created an alarming and rapidly evolving situation where patients and front-line healthcare workers were felt vulnerable. The pandemic impacted California with 8.94 million cases and 84, 832 deaths. The impacts of the evolving pandemic on the mental health of health care workers in the Central Valley of California, a region that has been disproportionately impacted by the pandemic are not known. This paper attempted to better understand these impacts. The main findings of the

paper were that the healthcare workers in the Central Valley were considerably impacted by Covid-19, and it caused high levels of depressive symptoms. Female healthcare workers and those with pre-existing conditions were more likely to be affected by the adverse effect of pandemic.

To complete this task, I carried out literature review, conducted a survey using Qualtrics and cleaned up the data for analysis. I analyzed the data using SPSS software using several statistical methods and wrote the paper.

b. *Research article on telehealth readiness of healthcare providers in the Central Valley of California and submit to a peer reviewed journal.*

I completed a research article titled: **“Evaluation of Healthcare Providers’ Readiness of Telehealth in the Central Valley, California, during the Covid-19 Pandemic”**

Summary: This paper provides new insights about the healthcare providers’ readiness in adopting telehealth technology in the Central Valley, CA. The paper explores how telehealth was used during the Covid-19 pandemic and how the healthcare providers were able to make the best use of the technology. The study also looked at the status of telehealth adoption of residents in the region in terms of their access to broadband internet, smartphone, and other electronic devices. Based on data obtained from a focus group discussion, the paper identified the areas of success of telehealth in providing access to healthcare during the pandemic. In addition, the paper also identified the challenges that need to be addressed for telehealth to be adopted more effectively in the future. The paper explored the lessons learned from the implementation of telehealth by healthcare providers during the pandemic. Finally, the study suggested a number of policies and strategies that can be undertaken for the sustainable implementation of telehealth adoption in the Central Valley.

To complete this task, I first conducted a thorough literature review to understand the state of telehealth implementation in the Central Valley. I organized a focus group discussion with several healthcare providers for a more in-depth understanding of the issues. The data and information gathered from the focus group discussion and literature review was used to write the paper.

c. *Write a grant application on telehealth for funding a Telehealth Resource Center at Fresno State.*

I completed writing a grant application titled: **“Proposal for funding for a Telehealth Resource Centre at Fresno State for Education and Training of the Rural Healthcare Workforce”**

Summary: The Central Valley in California with a predominantly rural and agricultural base is faced with unmet health needs and limited health care services. It is anticipated that many patients living in rural and medically underserved areas in this region can benefit immensely using telehealth services. The ongoing Covid-19 pandemic also generated great interest in the use of telehealth services. However, there is a shortage of healthcare providers who are adequately trained in telehealth in the Central Valley region. In addition, students graduating in the health sciences from Fresno State and other educational institutions in this area are not necessarily trained in telehealth services. The grant application is written to apply for funding to establish a Telehealth Resource Centre to be established in the College of Health and Human Services at Fresno State that can provide necessary training for students, healthcare organizations and practitioners in this region.

2. The modifications, if any, of the original proposal and the circumstances with which necessitated these modifications:

No modifications were made.

3. The goals of the original proposal that were not accomplished:

I have accomplished all the objectives stated in the proposal.

4. The anticipated outcome of the leave activities in the near future:

During the sabbatical leave I was able to undertake several new research initiatives. I believe it is going to be beneficial on several counts. They are mentioned below:

- a. I have used the data from my research to teach in the Master of Public Health program's Statistics and Epidemiology courses that I am teaching in spring 2022. I was able to share with my students the process of primary data collection in conducting research that I undertook during the sabbatical. Students are welcome to use the data for their own research in the course.
- b. I have presented my research papers to my colleagues of the department of Public Health during the March 2022 departmental meeting. I plan to present the papers at various local, regional, and national conferences.
- c. I will submit the two papers that I wrote during my sabbatical leave for publication in journals such as, California Journal of Public Health and a telehealth journal such as, Journal of Telehealth and Telecare. I will collaborate with my colleagues in the department to write more research articles for publication using the data collected and analysed during the sabbatical.
- d. Using the grant application that I wrote during the sabbatical I will continue to seek funds for the establishment of Telehealth Resource Center within the College of Health and Human Resources at Fresno State. Based on the research that I conducted during the sabbatical, I plan to develop a telemedicine certificate program to be offered in partnership with Continuing and Global Education at Fresno State.