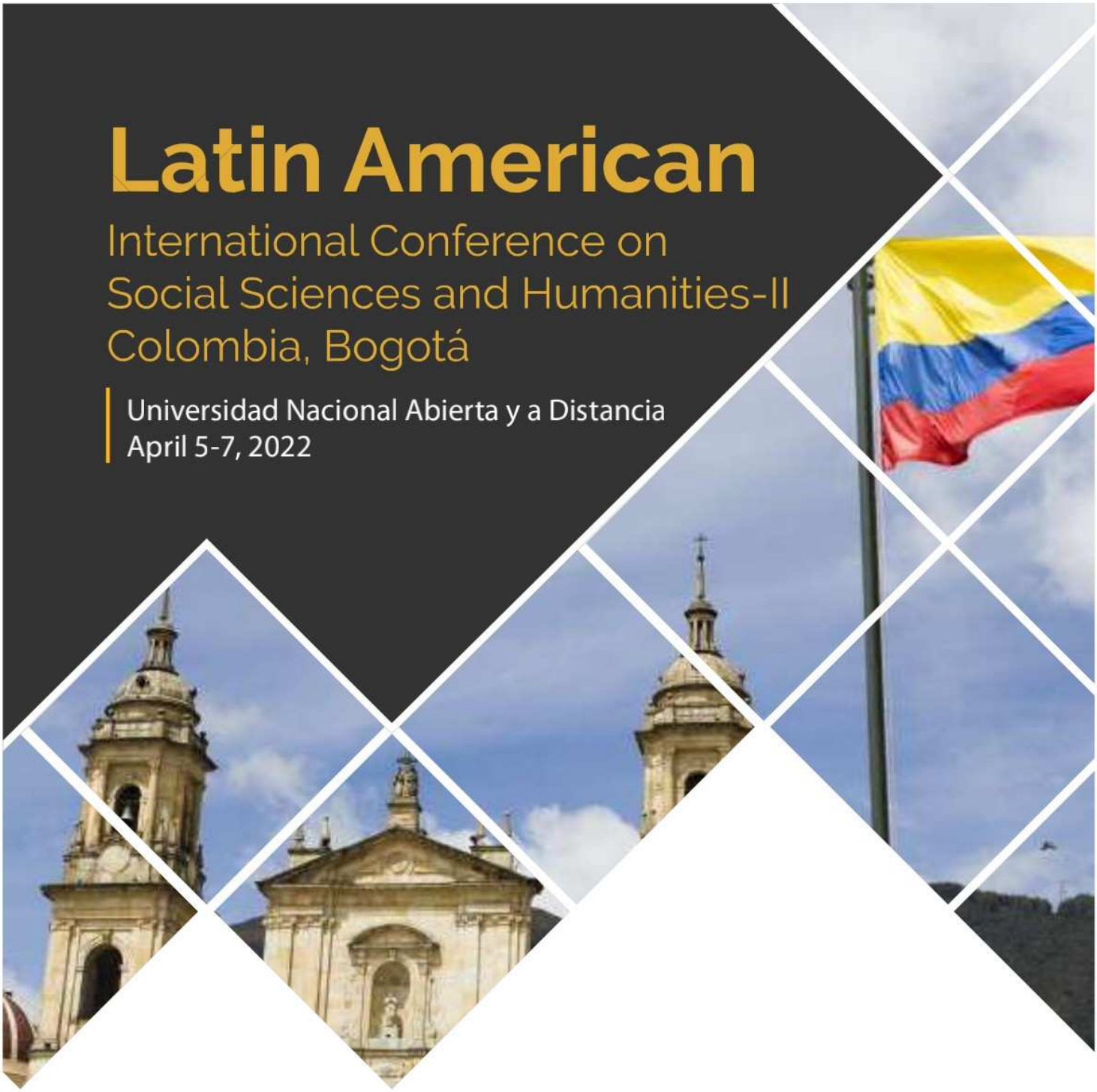
Latin American

International Conference on Social Sciences and Humanities-II Colombia, Bogotá

Universidad Nacional Abierta y a Distancia
April 5-7, 2022



PROCEEDING BOOK

EDITORS
Dr. Francisca Silva Hernández
Dr. Germán Martínez Prats
Dr. Lily Lara Romero
Dr. Felipa Sánchez Pérez
Dr. Isi Verónica Lara Andrade

ISBN: 978-625-8377-39-2

www.iksadamerica.org

LATIN AMERICAN INTERNATIONAL CONFERENCE ON SOCIAL SCIENCES AND HUMANITIES-II

PROCEEDING BOOK

April 5-7, 2022
Colombia, Bogotá

EDITORS
Dra. Francisca Silva Hernández
Dra. Lily Lara Romero
Dr. Germán Martínez Prats
Dr. Felipa Sánchez Pérez
Dr. Isi Verónica Lara Andrade

ISBN: 978-625-8377-39-2

CONFERENCE ID

LATIN AMERICAN INTERNATIONAL CONFERENCE ON SOCIAL SCIENCES AND HUMANITIES

DATE - PLACE

April 5-7, 2022
Universidad Abierta y a Distancia UNAD, Colombia

İKSAD- www.iksad.org.tr PARTICIPANT ORGANIZATIONS

Universidad Abierta y a Distancia UNAD, ColombiaUniversidad Juárez Autónoma de Tabasco, México
Institute of Economic Development And Social Research
Violence and Abuse Studies Platform

LANGUAGES

English, Spanish, Turkish

EVALUATION PROCESS

All applications have undergone a double-blind peer review process

TOTAL NUMBER OF PAPER: 122

The number of paper from Turkey: 10

Other Countries: 112

PARTICIPANT COUNTRIES:

Turkey, Mexico, Ukraine, USA, Azerbaijan, Colombia, South Africa, Romania, Nigeria, Pakistan, India, Australia, Iran, Poland, Kosovo, Vietnam

ORGANIZING AND SCIENTIFIC COMMITTEES

Dra. Felipa Sánchez Pérez
Universidad Juárez Autónoma de Tabasco, México
Chairman of the conference

Dra. Francisca Silva Hernández
Universidad Juárez Autónoma de Tabasco, México

Dr. Germán Martínez Prats
Universidad Juárez Autónoma de Tabasco, México

Dr. Jose Alberto Del Rivero Del Rivero
Universidad Juárez Autónoma de Tabasco, México

Dr. Rafael Ricardo Renteria Ramos
Universidad Abierta y a Distancia UNAD, Colombia

Dr. Ragif Huseynov
Managing Director of Khazar Educational Center, Azerbaijan

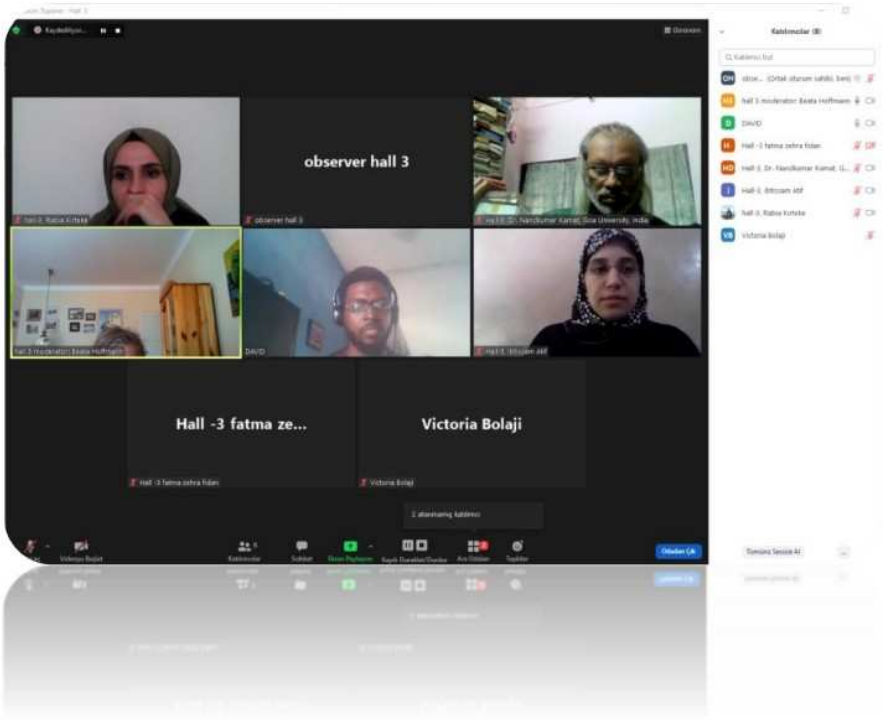
Dr. Raiba Jafarova
Associate Professor of Azerbaijan State Agricultural University, Azerbaijan

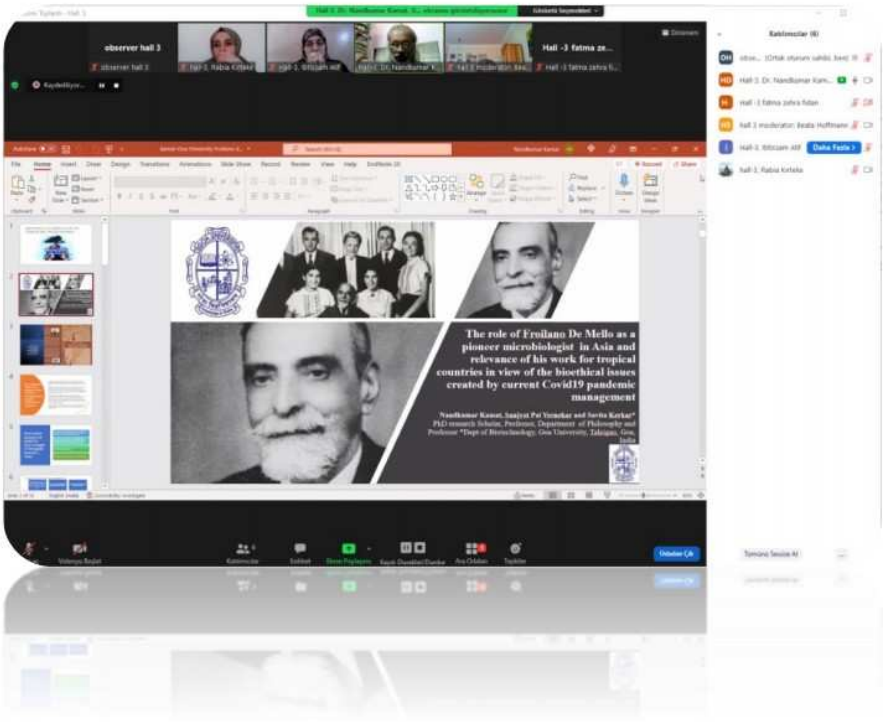
Dr. Resmiyye Abdullayeva
Associate Professor of Institute of Economics, Azerbaijan

Dr. Maral Jamalova
Assistant Professor of Azerbaijan State University of Economics, Azerbaijan

Bunyamin Seyidov
PhD student of Institute of Philosophy and Sociology, Azerbaijan

SOCIAL SCIENCES, HUMANITIES AND ARTS BOARD MEMBERS LIST


observer hall 3
Hall -3 fatma ze...
Victoria Bolaji


observer hall 3
Hall -3 fatma ze...
The role of Froilano De Mello as a pioneer microbiologist in Asia and relevance of his work for tropical countries in view of the bioethical issues created by current Covid19 pandemic management

THE ROLE OF FROILANO DE MELLO AS A PIONEER MICROBIOLOGIST IN ASIA AND RELEVANCE OF HIS WORK FOR TROPICAL COUNTRIES IN VIEW OF THE BIOETHICAL ISSUES CREATED BY CURRENT COVID19 PANDEMIC MANAGEMENT

Nandkumar Kamat, Sanjyot Pai Vernekar and Savita Kerkar*

PhD research Scholar, Professor, Department of Philosophy and Professor *Dept of Biotechnology, Goa University, Taleigao, Goa, India, 0000-0003-1070-0492, 0000-0002-3475-4105, 0000-0003-3924-8604

ABSTRACT

This paper in bioethical dimension of tropical disease management, attempts to present the importance of understanding the origin, prevalence, morbidity, and mortality of various tropical Zoonotic diseases in former Portuguese colony of Goa, India. Methodology involved extensive information from available publications from Goa and Portugal on basis of which this paper reviews especially the relatively unrecognised pioneer role played by the Goan microbiologist Froilano De Mello in the first half of the 20 th century in promoting systematic research and pathological and epidemiological investigations for effective control and ethical management of certain tropical zoonotic diseases. Microbiologist De Mello migrated to Brazil in the 1950s and worked in the laboratory of the celebrated Brazilian parasitologist Samuel Pessoa at the University of Sao Paulo. But his work done till then in Goa under the Portuguese rule in understanding tropical zoonotic diseases and their ethical management remains useful in management of modern pandemics like the current SARS COV2 pandemic based on certain well established epidemiological principles identified by De Mello in first half of the 20 th century. The paper would try to focus on De Mello's work to fill an important knowledge gap in understanding the history of tropical Zoonotic disease outbreaks, epidemics, and pandemics in the tropics with special reference to the relevance of his work to tropical countries. These results would be presented.

Keywords: bioethical, diseases, epidemic, Goa, Portuguese, tropical

Introduction

The past has a connection to the present and the future especially learning from the management of epidemics and pandemics. The concept of bioethics was not developed till 1970. But we find some examples of management of diseases in first half of 20 th century with concern for ethical principles [1]. The current SARS COV 2 pandemic has raised many bioethical issues which need to be addressed by international and national organizations. This paper was prompted by the work of the Goan Microbiologist Froilano De Mello [2] who handled many challenging situations a century ago and left behind publications [2,3] useful to deal with tropical diseases in a systematic and ethical manner. The novel coronavirus SARS-CoV-2 emerged in Wuhan, China, in December 2019 and has swept through nearly every country in the world, with more than 498 million confirmed cases and 6.2 million attributable deaths, as of April 9 2022 [4]. For past 12000 years humans have faced pandemics due to Cholera, bubonic plague, smallpox, and influenza. And outbreaks of these diseases across international borders, are properly defined as pandemic, especially smallpox, which throughout history, has killed between 300-500 million people. UNESCO's General Conference on 19 October 2005 adopted In October 2005, the United Nations Educational, Scientific and Cultural

Organization (UNESCO) adopted the *Universal Declaration on Bioethics and Human Rights [5].* The preamble states: "It is necessary and timely for the international community to state universal principles that will provide a foundation for humanity's response to the ever-increasing dilemmas and controversies that science and technology present for humankind and the environment". Berlinger and Moses from The Hastings centre, had prepared a bioethics backgrounder in 2007 [6] in anticipation of a future pandemic. They had identified - few plans contain concrete guidance on how officials and first responders can make ethical decisions—fair decisions—under immense pressure. An expert group in 2006 had identified how pandemic plans- handle ethics. Such plans may include priority lists without justifying why certain individuals or groups are given priority access to scarce resources. Plans may fail to acknowledge the existing disparities of income, resources, health, and access to health care, or may fail to describe efforts to avoid worsening these disparities. Plans may fail to explain how public health ethics, with its emphasis on fair distribution of limited resources, differs from everyday clinical ethics, with its emphasis on protecting the rights of individual patients. Duarte et al [7] have pointed out the deficiencies in bioethical standards. Xafis et al [8] have highlighted the great diversity of ethical issues raised by COVID-19 by addressing six disparate areas: Health Inequity, Triage/Resource Allocation, Research Ethics, Data Privacy and Tracing Apps, Exit Strategies, and COVID-19 and the Environment. They mention that -these issues need to be contextualised for each society, debated, and acted upon as each society passes through the different phases of the pandemic and its aftermath. They observed that –"the vast range and complexity of these ethical issues have contributed to the increased uncertainty we are facing in every aspect of our lives globally". We were exploring the question- How tropical diseases and epidemics were managed in Portuguese colonies in India?. The Portuguese introduced the European style of medicine in Goa from 16 the century and imparted western system of medical education from middle of 19 th century. It was a different system in the rest of India under the British rule till 1947 therefore the Portuguese became the pioneers in several things including issuing detail regulations on health, hygiene, and public sanitation and in educating the local communities on several tropical zoonotic diseases. By working closely with the local communities, they managed to reduce the disease burden and large-scale mortality. The Portuguese believed in ethical treatment of the patients. We tried to identify some of the simple principles which we could discern after going through the work of Froilano De Mello.

Materials and Methods

Basically primary sources included the available publications of Froilano De Mello [2,3] and secondary sources included research done in Goa (1,2) and Portugal [3] on his life and work. Standard references [5-8] on bioethical concerns associated with Covid-19 pandemic management were accessed through various online literature databases. We attempted to discover disease management practices used by Froilano De Mello during his work in Portuguese Goa from the above sources and identified ethically valuable elements useful to deal with management of tropical zoonotic diseases, epidemics, and pandemics.

Results and Discussion

We found that Dr. Froilano De Mello imbibed many western values throughout his early education which served him later in management of the tropical zoonotic diseases. He was born on 17th June 1887, in Benaulim, Salsete, Goa. In 1945 he migrated to Brazil and died in Brazil on 19th January 1955. He completed his medical studies in Escola Medico-Cirurgica de Nova-Goa in 1908 and

continued his studies at the Medical School of Oporto, where he graduated in 1910 with the dissertation Introdução ao estudo dasfebres de Goa – uma página da patologia colonial (Introduction to the study of Goa's fevers – a page on colonial pathology).This was followed by a course in Tropical Medicine at the University of Lisbon. He specialized in parasitology under Prof. Laveran and in mycology under Prof. Sabourand. He specialized under Prof. Max Hartman at Wilheim Institute fur Biologie de (Potsdam) Berlin. At 23 years he was appointed a faculty member in the Cadre of Health Services of Portuguese India and lecturer of Escola Medico-Cirurgica de Nova-Goa, his alma mater. He introduced and developed microbiology and tropical pathology. Froilano's work as Director of Health Services in Portuguese Goa , to control diseases like malaria, tuberculosis and leprosy involved drafting of several rules and regulations. These included - Administrative Committee for Sanitary and Urban Improvements of Nova-Goa (Comissao Adminitrativa dos Melhoramentos Sanitarios e Urbanos de Nova-Goa); Administrative Committee of Leprosaria, Central; Traffic and use of spurious drugs; compulsory anti- cholera vaccination in case of epidemics; practice of pharmaceutical profession in Portuguese India and on the functioning of pharmacies and ambulances, drugstores, and similar establishments; internal functioning of Leprosaria Central; sanitary Maritime Station of Mormugao; Establishment of Institute of Radiology; Creation of a Sanitary Permanent Police; Establishment of a Branch of Leprosaria Central of Macasana in Pragana, for the isolation and treatment of lepers from Daman; preventive treatment of rabies in Daman Hospital; prophylactic measures against Heine Medin disease; transfusion of human blood to patients admitted in Government Hospitals. When we consider management of tropical zoonotic diseases in 21 st century we could see the vision of Dr. De Mello. Dr. Froilano managed dozens of tropical diseases but we have restricted to the major ones.

Controlling Typhoid fevers

The mortality due to Typhoid fevers in the early 20 th century Goa was 4000 deaths per million population per year. In 1910, Dr. Froilano presented his thesis on "Contribution to the study of fevers in Goa" for his Doctorate and proved bacteriologically that these fevers were caused by Bacillus of Eberth and they were of typhoid origin, rarely of paratyphoid-A and very rarely of paratyphoid-B nature. He worked closely with the patients and found that the fevers were contagious.

Controlling Cholera

From 1912-1918 Froilano studied the nature of Cholera and identified the bacteria as Vibrio and thus solved a major public health issue. Dr. Froilano proved that treatment of dreaded diseases like TB, Leprosy needs a different , studious, community based and compassionate and caring approach. In 1911, he worked on the committee formed for the reform of public health in the colony and was also the interim director of the vaccine institute. He helped to control the bubonic plague epidemic in the harbour of Mormugão. In 1914 he presented his research both at the sanitary conference of Lucknow and at the first sanitary conference ever organized in Goa where he presented his research on malaria, smallpox vaccines, immunity, ancylostomiases, cholera and public health.

Ethical treatment of Leprosy patients

Rodrigues ( ) has stressed the importance on research work on Leprosy by Dr. De Mello and his team. We need to understand that leprosy patients were treated very badly in Portuguese Goa and this was not appreciated by Dr. De Mello. His work on diagnosis and treatment of leprosy was

noticed by international experts and he was considered foremost leprologist in the world in the first half of the last century. We found that he was far ahead of his time in understanding the needs of Leprosy patients and establishing a Leprosarium for them , first in Asia at Macasana, Curtorim equipped with all the necessary facilities [9]. The ethical and humane treatment of leprosy patients in this facility makes it clear that Dr. De Mello had a different approach in disease management.

Control of Malaria

Dr. Froilano and others conducted various studies on Malaria. But for its eradication he educated and involved the local people. When we examined his publications on Malaria we found that he had won the confidence of the patients by treating them with quinine. Portuguese Goa became first place in India to launch a community-based campaign, a people's campaign to eradicate Malaria. Unlike the coercive actions the world had witnessed during the Covid19 pandemic during 2020-21in Portuguese the dreaded epidemic of Malaria was brought under control through public education and involvement. In 1920' s Dr. Froilano de Mello and Luis Bras de Sa discovered and closed 18,000 unused wells in Old Goa, which were mosquito breeding grounds [1]. Research carried out by Dr. Froilano and others on various aspects of Malaria like anti-malarial campaigns; therapy, prophylaxis and various other aspects of Malaria was published in well-known scientific journals from India and Europe. As President of VIII th Provincial Congress Dr. Froilano also presented a paper where he demonstrated how the Malaria caused problems in hilly and interior regions of Goa. This resulted in better sanitation measures in those areas.

Conferences attended by Dr. De Mello

Current pandemic has shown the need for consistent pathological investigations and prompt actions. Dr. De Mello quickly show cased his investigative results by attending professional conferences [2,3]. These included the First Sanitary Conference in Goa in 1914, Provincial conferences of cholera epidemics in 1917, Typhoid Endemic in 1923, Leprosy in 1925, Tuberculosis in 1934. He was the President of VIII Provincial Congress of Portuguese India, held in Nova-Goa, in 1930. He also organized, the first congress of Tropical Medicine in Luanda in 1923. He represented Portuguese India in various conferences held in British India, such as All India Sanitary Conference in Lucknow, in 1914; Third and Fourth entomological meetings held in Pusa ,India in 1910 and 1921; Second and third Mycological Conferences held in Pusa in 1919 and 1921.He was only Goan delegate at the Indian Science Congress, V, VIII, XVII, XVIII, XIX, XXI, sessions, held in Lahore, 1918, Calcutta, 1921, Allahabad, 1930, Nagpur, 1931, Bangalore, 1932, Bombay, 1934.At the International level, he participated in Luso-Spanish Congress held in Porto and Orense (Spain) in 1921 and 1935 respectively; Terceiro Congresso Colonial Nacional, held in Lisbon in 1930., International Conference of Far Eastern Association of Tropical Medicine, held in Calcutta in 1927;Third International Congress of Paludism held in Amsterdam in 1935; Deuxieme Semaine Medicale Internationale (II International Medical Week) held in Montreux, in 1936;Douzieme Congress International de Zoologie, (XII International Congress of Zoology) held in Lisbon in 1935.He was the delegate of Portugal in places as diverse as Lahore in 1918, Coimbra in 1925, Calcutta in 1927, Cairo in 1928, Allahabad in 1930, Algiers in 1930, Padua in 1930, Oporto in 1931, Jujuy in1931, Bangalore in 1932, Bucharest in 1932, Lisbon in 1935,Amsterdam in 1935 and in 1938, Orense in 1935, Budapest in1935, Lausanne in 1935, Paris in 1937, Lourenço Marques in1938, Johannesburg in 1938, and Havana 1949. In 1949 he headed the Portuguese delegation to the World Leprosy Conference held in La Havana. In 1950, he participated in the Fifth International

Congress of Microbiology held in Petropolis, as an invitee of Brazilian Government. Brazilian Government made an exceptional decision to extend invitation to Dr. Froilano, when they came to know non-cooperation from Portugal due to political reasons. At University of São Paulo (USP) he had been working at the laboratory of the celebrated Brazilian parasitologist Samuel Pessoa. From his intense professional interactions, we found that he used new ideas in prevention, diagnosis, and treatment of various tropical zoonotic diseases in Portuguese Goa. He systematically founded a system with the patients at the centre and thus fulfilled many of the current expectations of bioethicists for fair and ethical treatment. We found that Dr. Froilano's work was consistent with responsibilities and bioethical concerns highlighted much later by Berlinger and Moses, 2007 [6]. This includes -1. Surveillance –Dr. Froilano did this continuously by engaging people.2. Epidemiological investigation –Dr. Froilano was expert in this area.3. Development of lab tests:- He did this very effectively. 4.Vaccine development, testing, evaluation, deployment, safety evaluation; deployment of antiviral agents- Dr. Froilano used vaccination drives effectively. 5. Enacting travel or other quarantines –Dr. Froilano prepared meticulous but community friendly regulations 6. Facilitating medical and public health communications-Dr. Froilano's work to establish Asia's first Leprosarium and TB Sanitarium with public involvement and support shows that he was ahead of his time.

Conclusions

In conclusion, when we reviewed the work of Dr. Froilano De Mello on tropical zoonotic disease management in the age without any concerns for bioethics we found that it offers a model for tropical countries managing Covid-19 pandemic based on the following principles identified from his approach. 1. trust and work very closely with the people and the local communities 2. use knowledge and investigation-based approach and disseminate the same to the patients 3. adopt full transparency in diagnosis and treatment, don't hide anything 4. trust the patients, respect their human rights, and involve them in measures to prevent the diseases 5. Don't discriminate patients on basis of race, colour, language, religion or political views for prevention and treatment of diseases 6. no diseases are to be feared or dreaded and all could be studied and treated if people cooperate willingly 7. building systematic community confidence and motivation is the key to end epidemics. These lessons are important to manage the current SARS COV 2 pandemic.

Acknowledgments

We appreciate the assistance from Professor Christina Bastos, Senior Research Fellow, Institute Of Social Sciences, University Of Lisbon in making available her research work and detail bibliography on Dr. De Mello.

References

[1]. da Silva Gracias, Fatima. Health and Hygiene in Colonial Goa, 1510-1961. No. 4. Concept Publishing Company, 1994.

[2]. Rodrigues Menezes, M. P. Scientific Research In Goa:Contribution of Coronel Medico Idalancio Froilano De Melo, Govapuri, Institute Menezes Braganza, Volume VII:1, April-June, 2013, pp 115-126.

[3]. Bastos, Cristiana. "From India to Brazil, with a microscope and a seat in Parliament: the life and work of Dr. Indalêncio Froilano de Melo." Journal of History of Science and Technology 2 (2008): 139-189.

[4]. https://www.worldometers.info/coronavirus/ accessed on April 10, 2022
[5]. https://unesdoc.unesco.org/ark:/48223/pf0000146180.locale=en accessed on April 10, 2022
[6]. Berlinger, Nancy, and Jacob Moses. "The five people you meet in a pandemic—and what they need from you today." Hastings Center Report (2007).
[7]. González-Duarte, Alejandra, Martha Kaufer-Horwitz, and Carlos A. Aguilar-Salinas. "Bioethics in the COVID-19 Pandemic Research: Challenges and Strategies." Revista de investigación clínica 72.5 (2020): 265-270.
[8]Xafis, V., Schaefer, G. O., Labude, M. K., Zhu, Y., & Hsu, L. Y. (2020). The perfect moral storm: Diverse ethical considerations in the COVID-19 pandemic. Asian Bioethics Review, 12(2), 65-83.
[9]. https://hpip.org/en/heritage/details/1544 accessed on April 10, 2022