



"ENHANCING PUBLIC HEALTH STRATEGIES DURING INDUSTRIAL  
REVOLUTION 4.0 AND THE COVID-19 PANDEMIC"

# PROGRAMME BOOK & ABSTRAK BOOK

October, 26<sup>th</sup>-28<sup>th</sup> 2021

FACULTY OF PUBLIC HEALTH UNIVERSITAS AIRLANGGA





# Programme Book Dan Abstract Book

**52<sup>nd</sup> Asia-Pacific Academic Consortium for Public Health (APACPH) Conference**  
*ENHANCING PUBLIC HEALTH STRATEGIES DURING INDUSTRIAL REVOLUTION 4.0 AND  
THE COVID-19 PANDEMIC*

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**Pre-Conference : October 26, 2021**

*Faculty of Public Health, Airlangga University, Surabaya, Indonesia*

**Conference : October 27-28, 2021**

*Shangri-La Hotel, Surabaya, Indonesia*



## WELCOME MESSAGE FROM APACPH PRESIDENT'S



Dear colleagues and friends,  
Greetings and *Selamat Datang!*

On the advent of the 52nd APACPH Conference, I am honored to welcome you as the president of this internationally recognized organization. The conference, for which we have gathered to be held for the next two days, is graciously hosted by the University of Airlangga, here in Surabaya. My heartfelt congratulations goes to the host for organising a very significant event. The theme this year is "Enhancing Public Health strategies during Industrial Revolution 4.0 and the Covid-19 Pandemic", and we are expecting participants from a broad range of health related backgrounds. We hope this conference will promote and bring positive benefits to the locality and also to the community, not just in Surabaya but throughout the world of healthcare.

This is a meeting of hearts and minds, between physicians, public health officials, researchers, students and teachers. It's an auspicious prospect and a great opportunity, not only to consider the evolution of public health, but to contribute to it. If expectation runs high, it is with good reasons. In the course of the last decades, APACPH has developed into an organization which has raised the bar for public health standards and community awareness worldwide. Having been launched in 1984 with only five executives, APACPH now boasts representatives from a hundred of the largest and most influential public health institutions in this part of the world.

The goal of the Consortium is to achieve the highest possible level of health of the respective populations of all the nations of the Asia-Pacific region. Ideally, through research, education, strategic actions, as well as gatherings like this - APACPH can help improve the quality of life for thousands by addressing major public health challenges throughout the Asia-Pacific region; including to face threats from the newly emerged Covid-19 pandemic. Among the many challenges, we need to make sure health to be provided to all people, regardless of their social and financial conditions.

While the goals of this organization include striving for widespread improvement in public health, APACPH itself continues to evolve; the spirit of cooperation being an integral aspect of its effectiveness. APACPH has been working hard to be an organization that helped expand communities' knowledge in public health and through its annual conference, knowledge is shared between member countries. With that being said, the role to educate and spread the awareness of adapting the new normal is crucial. The practice of the new normal is indeed vital and timeless, and a significant factor in the evolution of public health.

My most sincere gratitude goes to all members, supporters and sponsors for all the activities that have been going on in the past, present and future. I do hope, APACPH can aim higher, particularly in this new era. I would like to appreciate every member's effort for the prosperity of APACPH and I wish your active participation for the future of APACPH. I look forward to a successful, enjoyable meeting in this lovely setting and wish all the delegates and participants fruitful deliberations, knowledge and experience sharing. Once again, a warm welcome to you all, and thank you for participating.

Kind regards,

A handwritten signature in black ink, appearing to read 'Wah Yun Low', written over a white background.

**Professor Wah Yun LOW, PhD**

**President, Asia Pacific Academic Consortium for Public Health (APACPH)**

**WELCOME MESSAGE**  
**FROM THE RECTOR OF UNIVERSITAS AIRLANGGA**



I feel so proud to welcome you all in Surabaya for attending the 52nd edition of the Asia-Pacific Academic Consortium for Public Health (APACPH) conference. It is such a tremendous recognition for Universitas Airlangga (UNAIR) to host a very prestigious international event. Since a long time ago, inequalities in many aspects of our lives have been open secret problems which are faced by many countries in the world especially in developing countries.

These problems are occurred by many factors that chain each other. For example, people who come from poverty society suffer malnutrition. To solve these problems, we need to see them holistically. In other words, trans-institutional and international efforts are needed to overcome these problems.

Universitas Airlangga as an education institution provider has a great spirit to give hand solving the problems. We tried to bring up immense awareness to our academic communities for doing research, publication and social services on the latest issue. On the other hand, we also cooperate with domestic and international organizations to defeat those problems holistically.

As we know, APACPH is an organization that focuses on health problems (APACPH is one of the international organizations that we have joined). This Conference aims to discuss the latest issue in the public health arena especially on what has worked and what are the lessons we have learned. The aim of APACPH meets our goals. Taking part in this international conference is just one of our baby steps to manifest our goals.

I hope all of you have a great time during this conference and build strong networking with the other participants.

**Prof. Dr. Mohammad Nasih SE., M.T., Ak., CMA**

**Rector**  
**Universitas Airlangga**



# ABSTRACT SESSION

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## Outcome of Tuberculosis Treatment among TB-DM Patients in Jakarta Indonesia

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**Background:** Implementation of Direct Observed Treatment Short Course (DOTS) were improved successfully in terms of number. Nevertheless DM is proven affecting in longer healing of TB patients. National guidelines on TB-DM exists since 2015, however there is little information on how TB-DM activities are carried out at the operational level.

**Aim:** This study aim to identify prevalence of DM among TB patients, the cure and the healing rates on TB among the confirmed TB-DM cases and other factors that influence outcomes of identified TB patients with DM (TB-DM).

**Method:** TB National Integrated TB Information System (SITT) 2017-2019 is the main source of data to obtain prevalence of DM among TB patients. The subjects were classified according to the following treatment outcome: cured and complete treatment, default, death, and relapse. Subjects with TB treatment outcome (transferred and missing data) and HIV positive were excluded for the analysis. Variable associated with the outcomes of interest were included in a polytomous logistic regression model.

**Result:** The study found 21% DM among all TB patients DM screening. TB cases compare TB-DM cases successfully treatment were 86.3%; death: 2.7 %, default: 8.1% and failure: 2.8%. On the other hand, results among the TB-nonDM cases were: successfully treatment were: 89.8%; death: 2.0%; default: 7.2% and failure: 1.1% (p value< 0.05). Result of regression, some main factors that associated with TB-DM patients with odds of default was higher for cases registered in government hospital (OR = 2.06, 95% CI 1.15–2.80); the odds of death was protected for cases registered in private hospital (OR = 0.23, 95%CI 0.6–0.95); and was higher for cases over 45 year (OR = 2.55, 95% CI 1.16–5.64); the odds of failure was greater for cases over 45 years (OR = 1.12, 95%CI 0.63–1.98), was protected for cases in private hospital (OR = 0.09, 95%CI 0.01–0.62) and government hospital (OR=0.19, 95%CI 0.09–0.42).

**Conclusion:** This study highlights the need for increased attention to management of tuberculosis among with TB and diabetes cases.

**Keyword:** Tuberculosis, Diabetes Mellus, Treatment