



# JPMA

Journal of the  
Pakistan Medical Association (Centre)

## Editorial Board

### Chairman

Shahid Ahmed Sami

### Editor-in-Chief

Fatema Jawad

### Associate Editor-in-Chief

Huma Qureshi

### Associate Editors

Qudsia Anjum Fasih

Sina Aziz

Syed Muhammad Mubeen

### Editor Students' Corner

Maida Qazi / Maryam Farooqi

### Statistical Reviewer

Syed Muhammad Zulfiqar Hyder  
Naqvi

### Managing Secretary

Anwar Ali Khawaja

### Administrative Secretary

Ahmed Abdul Majid

## MEMBERS

Aamir Raof Memon  
Aamna Hassan  
Aisha Mehnaz  
Ali Yawar Alam  
Anwar Ali Siddiqui  
Asif Khaliq  
A.R. Jamali  
Bushra Shirazi  
Farooq Azam Rathore  
Fehmina Arif  
Gulnaz Khalid  
Muhammad Iqbal Afridi  
Khalid Zafar Hashmi  
Kiran Ejaz  
Manzoor Hussain  
Masood Ali Shaikh  
Mehwish Kashif

Mirza Naqi Zafar  
Mohammad Wasay  
Muhammad Shahzad Shamim  
Syeda Nosheen Zehra Zaidi  
Ramsha Zaheer  
Rehman Siddiqui  
Rubina Naqvi  
Rumina Hasan  
Sadiah Ahsan  
Muhammad Shahid Shamim  
Syed Sharaf Ali Shah  
Sohail Akhtar  
Syed Mamun Mahmud  
Uzma Fasih  
Zakiuddin G. Oonwala  
Zubaida Masood

## INTERNATIONAL ADVISORS

Ahmed Badar (KSA)  
Amin Ali Muhammad Gadit  
(CANADA)  
Farhad Handjani (IRAN)  
Farrokh Habibzadeh (IRAN)  
Gerry Mugford (CANADA)  
Itrat Mehdi (OMAN)  
MEL Heyman (USA)  
Mohammad Bagher Rokni (IRAN)  
Mubeen Rafay (CANADA)

Mihnea Alexandru Gaman  
(ROMANIA)  
Osman Faruk Bayramlar (TURKIYE)  
Sanjay Kalra (INDIA)  
Shabih Zaidi (UK)  
Sultan Ayoub Meo (KSA)  
Tanveer Azher (CANADA)  
Tahir Masood (KSA)  
Zohra Zaidi (UK)

Articles published in JPMA do not represent the views of the Editor or Editorial Board.  
Authors are solely responsible for the opinions expressed and accuracy of the data.

The Journal of Pakistan Medical Association (JPMA) is published monthly from PMA House, Aga Khan III Road, Karachi-74400, Pakistan.

All articles published represent the opinion of the authors and do not reflect official policy of the journal. All rights reserved to the Journal of the Pakistan Medical Association. No part of the Journal may be reproduced, stored in a retrieval system, or transmitted in any form or by any other means, electronic, mechanical photocopying, recording or otherwise, without prior permission, in writing, of the Journal of the Pakistan Medical Association.

**Price:** Rs.2200/- (Single Issue)

**Annual Subscription:** 26,000/- in Pakistan and US\$500.00 for overseas countries (including air mail postage).

**Publication Office:** PMA House, Aga Khan III Road, Karachi-74400, Pakistan. Telephone: 92-21-32226443.

**E-mail:** editor@jpma.org.pk

**ACKNOWLEDGEMENT**

S-1

**EDITORIAL**

**Economics of prescription of medicines in Pakistan; market failure or executive decision. Points to ponder for improving prescription practices.**

Shahzad Ali Khan

S-2

**Addressing incentive-driven prescribing**

Zafar Mirza

S-4

**ORIGINAL ARTICLE**

**Physicians' inclination towards standard guidelines and regulations on incentive based prescribing practices in Karachi. A mixed methods study design**

Mishal Sameer Khan, Afifah Rahman Shepherd, Zahida Azizullah, Sabeen Shareef Khan, Muhammad Naveed Noor, Nina van der Mark, Sadia Shakoor, Rumina Hasan, Amna Rehana Siddiqui

S-6

**RESEARCH ARTICLE**

**Understanding the socioeconomic dimensions of antibiotic resistance: a critical marketing perspective of healthcare stakeholders**

Fazle Malik, Arsalan Shahzad, Zahid Mehmood

S-11

**Incentive-linked prescribing and the plights of patients: a qualitative study in Pakistan**

Muhammad Naveed Noor, Zahida Azizullah, Haider Safdar Abbasi, Nina van der Mark, Afifah Rahman-Shepherd, Amna Rehana Siddiqui, Mishal Sameer Khan, Rumina Hasan, Sadia Shakoor

S-19

**OPINION ARTICLE**

**Relationship of physicians with the pharmaceutical industry in Pakistan: present status, issues, and way forward**

Waris Qidwai

S-24

**SCOPING REVIEW**

**Prescription ethics in a low-middle income country: Thematic analysis of research from Pakistan**

Tashfeen Ahmed, Ceemal Khan, Kausar Khan

S-28

**SPECIAL COMMUNICATION**

**Developing a conceptual framework for the practical ethics of prescribing in medical school curricula**

Emma Kelley, Janet Grant, Muhammad Shahid Shamim, Mohammed Ahmed Rashid

S-38

**SHORT COMMUNICATION**

**Physician's prescription and pharmaceutical industry's influence - where have the ethics gone?**

Zaeema Ahmer

**S-44**

**COMMENTARY**

**Commentary on prescribing ethics and conflict of interest**

Amna Rehana Siddiqui, Mishal Sameer Khan

**S-47**

**SHORT REPORT**

**Capacity building and enhancing knowledge of the healthcare providers on inappropriate practices and dispensing of antimicrobials**

Mubashir Hanif , Nawal Naeem, Shehzad Ali Khan, Ramesh Kumar, Sheraz Ahmed Khan, Mumtaz Ali Khan

**S-50**

## Acknowledgement

We are delighted to present this special JPMA supplement, that illuminates ethical considerations in prescribing practices and the concept of conflict of interest in medical practice. It combines articles addressing themes like ethical marketing, pharmaceutical incentivization, and ethics as core components in medical education.

The supplement is funded by the grant entitled: Addressing Conflict of Interest Driving Irrational Prescribing of Antibiotics in Pluralistic Health Systems: An Interventional Study in Pakistan (MR/T02349X/1).

We gratefully acknowledge the contributions of all authors who submitted manuscripts. A total of 11 articles have been included in this supplement. All articles were reviewed by internal and external reviewers and comments were addressed by respective authors.

We would like to take this opportunity and thank all the internal and external peer reviewers: Dr Rumina Hasan, Dr Amna Rehana Siddiqui, Dr Sadia Shakoor, Dr Mishal Khan, Dr Muhammad Naveed Noor, Nina van der Mark, Dr Sameen Siddiqi, Dr Eslam Elbaaly, Dr Ramesh Kumar, Dr Waris Qidwai, Dr Suleman Otho, Sualeha Shekhani, Dr Zaeema Ahmer, Dr Natasha Ali and Dr Emma Kelley. Their input was instrumental in ensuring a seamless review.

We would also like to express our sincere gratitude for the enormous efforts of Dr Amna Rehana Siddiqui in leading the development of this supplement along with Zahida Azizullah, Dr Sameen Siddiqi, and Dr Muhammad Naveed Noor.

Finally, we thank Dr Fatema Jawad, the editor-in-chief of the Journal of Pakistan Medical (JPMA) for her continued support in hosting this supplement.

### **Publication Committee**

Aga Khan University & London School of Hygiene & Tropical Medicine