



ISSN 0971-8834

JK-Practitioner

International Journal of Current Medical Science & Practice

July-September 2022

Volume 27 Number 3

www.jkpractitioner.com

Supplement 3

Covid-19: Public Health Management



INDEXING AND ABSTRACTING:

THE JOURNAL IS INDEXED AND ABSTRACTED IN IndMED/EMBASE/EXCERPTA MEDICA, INDMED, SCOPUS, PUBMED (FOR MEDLINE) ULRICH'S PERIODICALS DIRECTORY USA, INDEX ACADEMICUS (IA), INDEX COPPERNICUS, EBSCO, GOOGLE SCHOLAR AND IS LISTED WORLD WIDE IN UNIVERSITY AND COLLEG DATABASES. Bibliographic details of the journal available in ICMR-NIC centre's IndMED database (http://indmed.nic.in)Full text of articles being made available in medIND database (http://medind.nic.in) (2002-2015 issues only) and at www.jkpractitioner.com (1994 till date)

www.jkpractitioner.com

Volume 27 Number 3 Supplement-3 July-September 2022

Founder, Owner and EDITOR-IN-CHIEF:

Prof. G.M. Malik MD, FACG. Email: drgmalik70@gmail.com PO BOX 58, Srinagar-190001(INDIA), Mobile 9419007198

EDITOR:

Zaffar Abbas Khatib MD Email : zaffar.abbas@gmail.com Mobile 9906524667

ASSOCIATE EDITOR

Malik Suhail MD Mobile: 919596049122

DEPUTY EDITOR

Aamir Majeed Mobile: 917006763221

Email:malikaamirmajeed@gmail.com

CONSULTANT EDITORS:

USA: Farooque A Khan MB, MACP, FCCP; Arfa Khan MD PK ShahMD, FACS; Fiyaz A Shawl MD; Romesh KhordariMD, FACP, FACE; FCAP, Ghulam Jeelani Dhar MD, FACG; Khalid J Qazi MD, FACP; Iftikar J Shah MD, FACC; MA Shah MD, FACG; Mir Tanver; Abdul Rouf Mir MD

UK: Altaf Hussain MS, MCh Orth;FICS MA Jalu, GJ Mufti DM, FRCP;GR Mufti FRCS;MA Mir FRCS KSA Mohmmad Al Karawal FA;Ibarahim AlTememi FA;Abdul Majid FRCS;Fadel ARazaak FRCS;Syed Manzoor Qazi FRCS;Saleh M Al Salamah FRCS;Shabir AOazi MS

INDIA: S Nundy MS, MCh; Naresh Tehran; MCh, Upendra Koul MD,DM,DNB; VP Venktachanlam MS; G.N Qazi (New Delhi) Ketan Desai MS, MCh; (UP) MS; S Sodan MS(Jammu)Sudipo Roy MD (West Bengal); MS Khuroo MD, DM; Showkat A Zargar DM; (Srinagar); Manish Sen Kinra MDS, Pranjan Mitra MDS, (Punjab), R. K Chrungoo, Pavan Malhotra (Jammu), Samia Rashid MD, AG Ahanger MCh, Showkat Jeelani MS, Ruby Reshi MD (Srinagar)

ADVISORY BOARD

GQ Allaqaband FRCP; Mahmooda Khan MS; G.R. Mir MS; T.S. Sethi MS; A Parihar DM; Abdul Kabir Dar MD (ISM) MS, Khursheed Iqbal, Mushtaq A Magroob, Riaz Farooq, A.H Zargar (D.M), Qazi Masood (M.D), Shahida Mir (MS), Rafiq Ahmad Pampori (M.S); Muzaffar Ahmad, MA Kamili, Parvez A Shah DM; Kaiser Ahmad, MD; Shahnaz Tang MD; Showkat Zargar DM; RP Kudiyar DM; KK Aggarwal MD; Pervaiz Kaul MD; Gul Javaid DM; Nighat Firdous MD, O.J. Shah MS; Reyaz Untoo MS.

Design & Layout

Shaheed-e-Azam Press & Hospitality Pvt. Ltd. SCO 3-4, Chowk Gurudwara Dukhniwaran Sahib, Sirhind Road, Patiala-147001 (Punjab) India, 0175-2357981, 98146-32807 email: shaheedeazampta@gmail.com JK-Practitioner ISSN 0971-8834

Volume 27, Number 3 RNI-JK-ENG-1994-2673

AIMSAND SCOPE

JK-Practitioner is a multidisciplinary Medical Journal published quarterly from Srinagar. Emphasis is placed on matters related to medicine in the country in particular, while articles from anywhere in the world are given due importance. Besides original articles and case reports the journal includes clinical reviews, guest articles and special articles on current topics in medicine and therapeutics

INFORMATION FOR SUBSCRIBERS:-

The JK-PRACTITIONER- Frequency Quarterly, one volume per year beginning in January. Other issues in April, July and October. Correspondence regarding Editorial matters should be addressed to the Chief Editor, G M Malik, PO BOX No. 58, GPO, Srinagar, Kashmir (INDIA). Annual Subscription rates:-Personal Rs. 1500/-Institutional Rs.2000/-, Reduced Rs.1200/-Institutional rate applies to Libraries, Schools, Hospitals, Clinics, Commercial and Private institutions and organisations. Reduced rate is avaliable for medical students only. Rates outside India US \$100/-Gulf countries SR 100/-.All other countries US \$100 or equivalent. Concessional Rate for personal subscription is available for a three year term at Rs.4000/-. Outside India US \$ 200/- Gulf Countries SR 250/-Postal Charges within the country are Rs.100/-extra for a oneyear subscription. Single current issue Rs.600/-. Prices are subject to change. Change of Address:- The publisher must be notified 60 d a y s i n a d v a n c e . Indexing /Abstracting Services:-The journal is currently abstracted and indexed in in EMBASE/Excerpta Medica database, IndMED, Pubmed (Medline) and listed in Ulrich's Periodicals Directory (USA), INSDOC (INDIA). And Index Academicus (IA) Scopus, SCI. Copyright information:-When the manuscript is accepted for publication the authors agree to automatic transfer of the copyright to the publisher that the manuscript will not be published elsewhere inany language without the consent of the copyright holder. Old issues ofthe journal can be purchased at 15 % discount subject to availability. INFORMATION FOR AUTHORS SUBMITTING MANUSCRIPTS:-Manuscripts are to be submitted on a CD in MS Word with two hardcopies*. The articles undergo the standard review process. Please allow 9-12 weeks before information regarding acceptability, resubmission or rejection is conveyed to the authors. Once the articleis cleared for publication the authors will have to bear the publication cost.

WEBSITE: http://www.jkpractitioner.com

*To speed up the process of REVIEW, manuscripts could be submitted on **zaffar.abbas@gmail.com**

Supplement:3

Covid-19: Public Health Management

This supplement is a collection of original review based articles which provide assessment of the Impact of Covid-19 on Public Health from different perspectives of Modern & traditional medicines, Mental & Psychological, Bioethics, Medical Ethics and Medical Humanities, Medical Engineering and Public Health Management **Dr. Nirbhay Kumar Mishra** (one of the editors of this issue) has been the research shaper and lead author in most of the articles with a justified reason that he works in the area of ethics and he tried to develop a collection of the review based papers by analyzing the ethical perspectives across different disciplines by motivating and involving research scholars in a collaborative manner.

Dr Mishra is working as an Assistant Professor at the Institute of Applied Sciences & Humanities ,GLA University , Mathura.

Ms Misba Hamid Baba (the other editor of this supplement) has been a research scholar at the Institute of Applied Sciences & Humanties, GLA University Mathura, now working as a research officer in the Department of Radiological Physics, SKIMS, Srinagar.

Editor JK-Practitioner

Supplement Editors



Dr Nirbhay Kumar MishraAssistant Professor
Institute of Applied Sciences
& Humanities GLA University,
Mathura



Misba Hamid Baba Research Scholar, Department of Physics, GLA University Mathura,

The year 2020-2021 has seen most unprecedented events that this century has ever witnessed. The covid-19 pandemic has altogether halted life as a whole and had a significant impact on all the day to day chores of academics, as well as other industrial and corporate sectors. But a good thing that happened after a great chaos and confusion was that mankind learnt new ways to adapt to this new normal so as to combat the infection as well as manage the day to day chores. GLA University is playing a pivoting role in the research and development of the Research Scholars. We scholars from GLA University also tried to device and suggest different solutions and perspectives to combat the infection as well as manage the daily chores by reviewing various health related ethical dilemmas. And thereby we came upon this Supplementary issue on Covid-19 along with the editorial team of JK-Practitioner. The special issue is based on quality and scientific review papers on the impact of Covid-19 on public health management. This issue consists of five major sections in which the scope of research is wide and extended to develop research with updated scientific, medical, technological practices such as drug trials and developments from modern and traditional approaches. Further, the medical ethics point of view aims to manage the public health ethically such as the cancer care management. The recent technological practices in medicine and public health management like the use of Nanotechnology, Artificial Intelligence, Machine Learning, the Internet of Things and Big Data Analysis are in their scope review that adds value to public health management.



JK-Practitioner

International Journal of Current Medical Science & Practice

S6 P:

Section-I

Covid-19 Drug Testing / Vaccines / Post-Covid Compliments

Prevalence of Post-Covid Complications and Challenges for A New Normal: A Short Survey Based Study

Misba Hamid Baba, Benoy Kumar Singh, Nirbhay Kumar Mishra, Sajad Ahmad Rather, Tauseef Ahmad Teli, Mohib-ul Haq Malik

S13 Covid 19 Vaccination Program In India: A Comparative Ethical Review

Nirbhay Kumar Mishra, Bhupendra Kumar, Misba Hamid Baba

S23 Covid-19 Approaches To Therapeutic Agents And Vaccines: Human Challenges And Ethical Issues

Nirbhay Kumar Mishra, Sushma Singh, Misba Hamid Baba

S32 Testing Approaches And Methods In Covid-19 Pandemic: Human Challenges and Ethical Issues

Nirbhay Kumar Mishra, Manjusha Deewan, Rakhi Singh

S48 mRNA Based Vaccine Development As A Catalyst To Combat Covid-19: Bioethics Issues In Vaccine Development Program

Nirbhay Kumar Mishra, Satish M Bhoge, Misba Hamid Baba

S56 Impact Of Covid-19 On Health Care Management: When Ethics Matter!

Nirbhay Kumar Mishra, Sakshi Varshney, Misba Hamid Baba

S63 Approaches of Surgical Triage during the Covid-19 Pandemic: Ethical Dilemma and Challenges

Nirbhay Kumar Mishra, Tarun Chaudhary, Misba Hamid Baba

S74 Managing Violence in Healthcare in Covid-19 pandemic : A study on Viral Epidemic in Indian Context

Himani Oberoi , Nirbhay Kumar Mishra, Misba Hamid Baba

S82 Impact of Covid-19 on Mental Health: The issue of freedom and social privacy

Nirbhay Kumar Mishra, Priyadarshani Agarwal, Yogesh Murti, Misba Hamid Baba

S87 Pharmacologic Treatment, Modeling Of Virtual Database Screening Of Viruses And Drug Targets For Coronavirus Disease (2019 N-Cov)

Nirbhay Kumar Mishra, Arati Devi, Misba Hamid Baba

CONTENTS

	S94	Covid As Pandemic, Drug Used To Prevent Normal Flu Versa Covid
		Clinical Trial Related In Covid
		Nirbhay Kumar Mishra, Archana Kanaujia, Misba Hamid Baba
	S101	Mutations in spike protein of SARS-CoV-2 and emergence of new strain
_		Nirbhay Kumar Mishra, Renu Panday, Misba Hamid Baba
	S108	Integrative Approach to Treat Covid-19: Medical Ethics for Medical
		Leadership & Public Health Management during COVID Pandemic In India
1		Manisha Semwal, Nirbhay Kumar Mishra, Misba Hamid Baba
	S120	Medical Ethics and Medical Research: The case of Covid-19
		Nirbhay Kumar Mishra, Misba Hamid Baba

Section-II Cancer Care and Emergency Preparedness in Covid Pandemic

- S127 Radiotherapy Based Cancer Care Covid Health Management: Human Challenges And Ethical Issue
 - Mohini Manav, Misba Hamid Baba, Nirbhay Kumar Mishra,
- S134 Workflow and Ethical Issues in Maintaining Quality Assurance, Dosimetry, And Treatment Planning During COVID-19: Medical Physicist's Perspective
 - Sanjib Gayen, Nirbhay Kumar Mishra, Sumanta Manna, Sweta Soni, Sonal Varshney, Misba Hamid Baba, Puneet Pareek, Raj Pal Singh
- S141 Cancer Health Care Management at A Tertiary Care Hospital During The Covid-19 Pandemic: A Bio-Ethical Perspective
 - Mohsin Rehman Khan, Nirbhay Kumar Mishra, Anuj Vijay, Misba Hamid Baba, Mohib-ul Haq Malik
- S148 Management of Treatment Delivery to Cancer Patients In Radiation Oncology Department During Covid -19 Pandemic: Pandemic Preparedness Plan In Radiation Oncology, PPP-RO
 - Aijaz A Khan, Nirbhay Kumar Mishra, Anuj Vijay, Misba Hamid Baba, Sajad Ahmad Rather, Mohib-ul Haq Malik

CONTENTS

Section-III Artificial Intelligence / Internet of Things Based Health Management

- S155 Impact of IoT Powered Technologies on Covid-19 pandemic Health Management
 - Nirbhay Kumar Mishra, Shilpi Kaura, Misba Hamid Baba
- S162 Optimization Techniques in Fuzzy Pi Controller for Performing Covid-19 Test: Human Challenges and Ethical Issues
 - Nirbhay Kumar Mishra, Aditi Saxena, Jitendra Kumar, Vinay Kumar Deolia, Misba Hamid Baba
- S172 AI-Powered COVID-19 Health Management based on Radiological Imaging: Bio-Ethics Perspective
 - Nirbhay Kumar Mishra, Jharna Agrawal, Misba Hamid Baba, Manish Gupta
- S184 Data Ethics in IoT Powered Health Management (HIoTS and MIoTS): The Case of Covid-19
 - Nirbhay Kumar Mishra, Amrendra Kumar Singh Tomar, Misba Hamid Baba
- S193 AI-Powered Technology to Combat Covid-19: Ethical Efficacy Of Robotics and Humanoids
 - Nirbhay Kumar Mishra, Priyanka Saksena, Misba Hamid Baba
- S206 Bioethical Issues Concerning Image Processing: The Case of Covid-19
 - Nirbhay Kumar Mishra, Payal Singh, Misba Hamid Baba
- S213 Exploring The Application of Artificial Intelligence And Machine Learning To Combat Covid-19 And Implication On Health Services
 - Nirbhay Kumar Mishra, Savleen Singh Gandhi, Misba Hamid Baba

Section-IV Covid-19 and Nanotechnology

S223 Nanotechnology Powered Covid-19 pandemic Management: Medical Ethics Review

Nirbhay Kumar Mishra, Nudrat Jahan , Misba Hamid Baba

Section-V Herbal Drugs and Covid-19

S230 The Impact of Herbal Medicine on Covid-19: A New-Normal Ethics for Social Health

Nirbhay Kumar Mishra, Sharad Sharma, Misba Hamid Baba