

## List of proposals reviewed and approved by IRB (2020)

| SN | Principal Investigator(s)   | Title   | Certificate number  | Approved date |
|----|---|---|---------------------|---------------|
| 1. | Daw Nyein Moh Moh Myint, Instructor, University of Nursing, Mandalay  | Effectiveness of structured Health Education Module about Breast Self-Examination Based on Health Belief Model on Belief and Behaviors of Young Women living in Rural Area of Myanmar | Ethics/DMR/2020/004 | 14.1.2020     |
| 2. | Daw Yin Yin Htwe, Tutor, Disease Control Department, University of Community Health; U Aung Pyae Kyaw, Health Assistant, Ting Si RHC, Matupi Township                               | Situation of standard maternal and healthcare services and enablers and barriers among pregnant women in Matupi Township, Chin State: A Mixed-methods study                           | Ethics/DMR/2020/012 | 27.2.2020     |
| 3. | Daw Ni Win Htike, Health Assistant (1), Township Public Health Department , Aunglan   | Factors influencing health seeking behaviors on maternal health care services and challenges of care providers in Aung Lan Township   | Ethics/DMR/2020/013 | 27.2.2020     |
| 4. | Daw Ei Yadanar Khaing, Food Control Officer, Department of Food and Drug Administration, Ayeyarwady Region  | Factors associated with betel quid chewing practices among adult men betel quid chewers in selected townships of Ayeyarwady Region  | Ethics/DMR/2020/014 | 27.2.2020     |
| 5. | U Kyaw Htet Aung, Central Monitoring and Evaluation Manager, Myanmar Health Assistant Association   | Challenges and Barriers on Utilization of Health Management Information System at Primary Health Care Level in Kachin and Kayin States  | Ethics/DMR/2020/015 | 27.2.2020     |
| 6. | Daw Su Wai Phyo, Assistant Lecturer, Department of Environment Health, University of Community Health   | Assessment on utilization of delivery rooms in rural health centers and sub-centers among mothers of under one year children in selected townships at Magway Region                   | Ethics/DMR/2020/016 | 27.2.2020     |
| 7. | U Aung Zaw Htike, Health Assistant (1), Ye township, Mon State  | Utilization of Primary Health Care Services at Rural Health Centers and Sub-Rural Health Centers in Selected townships of Mon and Kayin States, Myanmar                               | Ethics/DMR/2020/017 | 27.2.2020     |
| 8. | Dr. Su Su Hlaing, District Public Health Officer, South District Public Health Department, Yangon Region; Dr. Tun Myint, Deputy Director General, Yangon Regional Health Department | Improving complementary Feeding practices (diet quality and hygiene) for 12-24 months old children in Dallah Township, Yangon Region  | Ethics/DMR/2020/018 | 26.3.2020     |

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| 9.  | Dr. Ni Ni Hlaing, Deputy Regional Public Health Director; Dr. Aye Nyein, Deputy Director General, Bago Regional Public Health Department       | Assessment of nutritional status and anaemia among nuns aged 5-12 years at Monastic schools in Bago Region before fortified rice intervention  | Ethics/DMR/2020/019 | 26.3.2020 |
| 10. | Dr. Myo Nyi Nyi, Senior consultant, Obstetrics and Gynaecology Ward, Thingangyun General Hospital  | Human Papilloma virus infection and cervical lesions among Human Immunodeficiency virus-infected pregnant women in tertiary care hospital  | Ethics/DMR/2020/020 | 26.3.2020 |
| 11. | Dr. Hsu Htet Thwe, Research Officer, DMR   | Expression of melanoma associated antigen gene 4 (MAGE 4) in patients with hepatocellular carcinoma  | Ethics/DMR/2020/021 | 26.3.2020 |
| 12  | Dr. Aung Pyae Phyoo, Post-Doctoral fellow Burnet Institute and MOCRU; Dr. Kay Thwe Han, DD, Parasitology RD, DMR; Dr. Aung Thi, DD, NMCP, DoPH | A cross-sectional survey and entomological assessment to detect the malaria transmission and malaria immunity in villages 6 years after a Mass Drug Administration pilot project in Kayin State, Myanmar                                     | Ethics/DMR/2020/022 | 26.3.2020 |
| 13  | Dr. Than Than Myint, DyDG, Regional Public Health Department, Mandalay; Dr. Aung Thein Aye, Secretary, MMCWA, Mandalay                         | Mothers' satisfaction on Delivery Clinics of Myanmar Maternal and Children Welfare Association in Mandalay Region  | Ethics/DMR/2020/023 | 28.4.2020 |
| 14  | Dr. Khaing Mar Zaw, Deputy Director, Nuclear Medicine RD, DMR  | Relationship between complementary feeding practices and anthropometry, body composition and energy expenditure among children aged 6 months to 2 years  | Ethics/DMR/2020/024 | 28.4.2020 |
| 15  | Dr. Khin Maung Gyee, Project Manager, MMA-SANOFI Mental Healthcare Project(Hlaing Thar Yar)  | Evaluation the effects of mobilizing community health care workers and primary healthcare staff to raise awareness about mental illness, and to identify and manage psychotic disorders, depression and epilepsy in Hlaing Thar Yar Township | Ethics/DMR/2020/025 | 28.4.2020 |
| 16  | Professor Rai Mra, MMA   | The use of convalescent plasma for treatment of COVID-19, Myanmar  | Ethics/DMR/2020/027 | 28.4.2020 |
| 17  | Dr. Win Thida, Lecturer/Head, Department of Microbiology, University of Nursing, Yangon  | Nasal and hand carriage of Staphylococcus aureus among nursing students from University of Nursing, Yangon   | Ethics/DMR/2020/029 | 28.4.2020 |
| 18  | Dr. Zaw Zaw Htun, Research Officer, DMR (POLB)   | Experiences and challenges of stay-at-home among community members in Myanmar during COVID-19 pandemic: An online survey   | Ethics/DMR/2020/030 | 7.5.2020  |

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| 19 | Dr. Myo Myo Mon, Deputy Director/Head, Epidemiology RD, DMR (HQ)  | Exploring psychological consequences among health workers during Coronavirus disease (COVID-19) outbreak in Yangon, Myanmar: An online survey  | Ethics/DMR/2020/031 | 7.5.2020  |
| 20 | Dr. Thae Maung Maung, Research Scientist, Medical Statistics Division, DMR (HQ), Dr. Wai Wai Han, Research Officer          | Epidemiological distribution and clinical characteristics of Coronavirus disease (COVID-19) in Myanmar   | Ethics/DMR/2020/032 | 7.5.2020  |
| 21 | Dr. Nyein Su Aye, Research Officer, HSR, DMR (HQ), Dr. Thanda Linn, Research Officer, HSR                                   | Compliance with prevention guidelines and messages informing the public about COVID-19 risks by Ministry of Health and Sports, Myanmar: An Online Survey   | Ethics/DMR/2020/033 | 12.5.2020 |
| 22 | Dr. Kyaw Thu Soe, Research Scientist, DMR (POLB)  | A rapid assessment on COVID-19 preparedness and response among public and private health care providers in Myanmar   | Ethics/DMR/2020/034 | 12.5.2020 |
| 23 | Dr. Aung Kyaw Kyaw, Deputy Director, Virology Research Division, DMR(POLB)  | Evaluation of the Commercially Available Fluorescent Immunoassay-based Dengue Rapid Diagnostic Test Kit for Diagnosis of Acute Dengue Virus Infection in Clinical Practice   | Ethics/DMR/2020/035 | 19.5.2020 |
| 24 | Dr. Kyaw Min Htut, Research Officer, Epidemiology Research Division, DMR  | An assessment of alcohol consumption, substance use and sexual risk behaviors among men who have sex with men (MSM) in Yangon and Mandalay, Myanmar  | Ethics/DMR/2020/036 | 19.5.2020 |
| 25 | Dr. Aung Ye Naung Win, Research Officer, Epidemiology Research Division, DMR  | Understanding the factors influencing amongst administration MDA (Mass Drug Administration) in selected Pre-TAS (Pre-transmission Assessment Survey) failed Lymphatic Filariasis districts of Myanmar in an elimination scenario | Ethics/DMR/2020/037 | 19.5.2020 |
| 26 | Daw Nilar, Assistant Nursing Superintendent, YGH  | Improving Documentation of vital sign(MR-4) and Fluid Intake and Output balance (MR-8) by nursing staff(s) at Yangon General Hospital  | Ethics/DMR/2020/038 | 12.6.2020 |
| 27 | Dr. Shwe Sin Pyone, Research Officer, Pharmacology RD, DMR  | Pharmacokinetic Analysis of fenofibrate in healthy volunteers  | Ethics/DMR/2020/040 | 12.6.2020 |
| 28 | Dr. Han Win, Director (Finance), DMR  | Incidence of Snakebite in Selected Townships of Magway Region  | Ethics/DMR/2020/041 | 12.6.2020 |
| 29 | Dr. Kay Thwe Han, Deputy Director /Head, Parasitology Research Division, DMR; Dr. Toe Thiri Aung, Deputy Director, CEU, DPH | Understanding the disease burden, social and ecological context and transmission of schistosomiasis in Nyaung Shwe township, Myanmar   | Ethics/DMR/2020/042 | 12.6.2020 |

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| 30 | Dr. Kham Mo Aung, Research Officer, Technology Development Division, DMR   | Urinary Detection of <i>Chlamydia trachomatis</i> and <i>Neisseria gonorrhoea</i> infections by GeneXpert CT/NG assay in symptomatic women attending Gynaecology outpatient department of Thingangyun General Hospital | Ethics/DMR/2020/043 | 12.6.2020 |
| 31 | Dr. Nan Cho Nwe Mon, Research Scientist, DMR; Professor Dr Khine Khine Zaw, Dermatology Department, YGH  | Direct immunofluorescence in diagnosis of clinically suspected bullous dermatosis and its correlation between clinical and histopathological diagnosis   | Ethics/DMR/2020/044 | 12.6.2020 |
| 32 | Dr. Mya Mya Aye, Deputy Director, Bacteriology Research Division, DMR (HQ)   | Clinical Characteristics and Treatment Response in Patients with Respiratory Tract Infections caused by Streptococcus pneumonia at Yangon General Hospital   | Ethics/DMR/2020/045 | 12.6.2020 |
| 33 | Daw Khin Sandar Oo, Assistant Director, Health System Research Division, DMR; Dr. Myo Ko Ko Zaw, Acting Program Manager(Leprosy) Disease Control Unit, DPH | Challenges and Barriers to Leprosy Management in the Pocket Areas of Monywa Townships in Sagaing Region  | Ethics/DMR/2020/046 | 12.6.2020 |
| 34 | Dr. Khin Hnin Pwint, Research Scientist; Dr. Saint Saint Kyaw Thein, Research Officer, Pharmaceutical Toxicology Research Division, DMR                    | Promoting safe and effective use of chemical disinfectants by general public and volunteers in non-health care settings of Myanmar in the context of COVID-19: A mixed-methods study                                   | Ethics/DMR/2020/047 | 28.6.2020 |
| 35 | Dr. Su Latt Tun Myint, Research Scientist, Epidemiology Research Division, DMR (HQ)  | Psychological consequences among public health professionals in Myanmar during the unprecedented COVID-19 pandemic period: An online survey  | Ethics/DMR/2020/048 | 28.6.2020 |
| 36 | Dr. Nandar Ko, RS Immunology RD,; Dr. Kyaw Ko Ko Htet, RS, Epidemiology RD, DMR (POLB)   | Evaluation of hematological parameters and clinical outcomes of hospitalized patients infected with COVID-19 in Yangon   | Ethics/DMR/2020/049 | 28.6.2020 |
| 37 | Dr. Aung Pyae Phy, Research Officer, HSR Division, DMR (HQ)  | Situation analysis of the medical supply chain management system of Ministry of Health and Sports, Myanmar: An Implementation Research   | Ethics/DMR/2020/050 | 3.7.2020  |
| 38 | Dr. Hlaing Myat Thu, DDG; Dr. Theingi Win Myat, Deputy Director, DMR   | Molecular Epidemiology and Clinical Profile of SARS-CoV-2 in Myanmar   | Ethics/DMR/2020/051 | 3.7.2020  |

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| 39 | Dr. Kyaw Thu Soe, Research Scientist, Health Systems Research Division, Department of Medical Research (POLB)   | Social Media and Modern Health Communication: Benefits and Harms of Facebook use during COVID-19 Pandemic in Myanmar  | Ethics/DMR/2020/052 | 3.7.2020  |
| 40 | Dr. Su Kyi Hlaing, Research Officer, HSR Division, DMR (POLB)   | Perception of health care providers on operational feasibility of community fever clinics in Mandalay District  | Ethics/DMR/2020/053 | 3.7.2020  |
| 41 | Dr. Kyaw Lwin Show, Research Officer, HSR Division, DMR (HQ)  | Implementation of Robson classification: Monitoring the caesarean rate in Thingangyun General Hospital, Myanmar   | Ethics/DMR/2020/055 | 6.7.2020  |
| 42 | Dr Min Min Win, Deputy Director /Head, Blood Programming RD, DMR; Dr. Aye Aye Win, SCS, Department of Pathology, Thingangyun General Hospital                     | Assessment of methylation status of RASSF1A and its association with hormone receptor status in breast cancer patients admitted at Thingangyun General Hospital | Ethics/DMR/2020/056 | 6.7.2020  |
| 43 | Dr. Chaw Su Hlaing, Consultant Paediatrician, Paediatric Neurology Unit, Yangon Children Hospital, University of Medicine 1, Yangon                               | Effect of antiepileptic drugs on bone health in children Correlation between the use of anti-epileptic drugs in children and bone health parameters             | Ethics/DMR/2020/057 | 6.7.2020  |
| 44 | Dr. Khin Moe Aung, Deputy Director, Pathology Research Division, DMR (POLB)   | Molecular detection of Hb E among blood donors from 300-bedded Pyin Oo Lwin General Hospital  | Ethics/DMR/2020/058 | 7.7.2020  |
| 45 | Dr. Thida, Director, DMR (POLB)   | Birth preparedness and emergency readiness in selected townships of Myanmar: An implementation research   | Ethics/DMR/2020/059 | 16.7.2020 |
| 46 | Dr. Kyae Mhon Htwe, Deputy Director, DMR (HQ)   | Sugar-sweetened beverage consumption patterns and estimated intake of aspartame from their sugary drink consumption among school-aged children in Yangon        | Ethics/DMR/2020/060 | 16.7.2020 |
| 47 | Dr. Kyaw Phyo Paing, Research Officer, Medical Statistics Division, DMR   | Antibiotic Use Pattern among patients attending at the Outpatient Department (OPD) of a Public General Hospital in Yangon, Myanmar                              | Ethics/DMR/2020/061 | 16.7.2020 |
| 48 | Dr. Thi Thi Htoon, Head/Senior Consultant Microbiologist, Bacteriology and Parasitology Sections, NHL; Dr. Ommar Swe Tin, DD, NHL, Department of Medical Services | Prevalence of carbapenemase producers among Carbapenem Resistant Enterobacteriaceae clinical isolates in Myanmar  | Ethics/DMR/2020/062 | 16.7.2020 |

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| 49 | Dr. Phyo Wai Zin, Research Officer, Pharmacology Research Division, DMR (HQ)  | Assessment of arsenic exposure status among residents in rural area of Kyaunggon Township, Ayeyarwady Region  | Ethics/DMR/2020/063 | 16.7.2020 |
| 50 | Dr. Hpoo Pwint Myo Win, Research Officer, Bacteriology Research Division, DMR   | Antibiotic susceptibility pattern of Streptococcus pneumoniae isolated from under five children presenting with acute respiratory infection attending Yangon Children Hospital in post PCV period | Ethics/DMR/2020/064 | 16.7.2020 |
| 51 | Dr. Nyein Nyein Thaug, Research Officer, Parasitology Research Division, DMR (POLB)   | Prevalence of intestinal parasitic worm infections among food handlers at schools of Pyin Oo Lwin Townships, Myanmar  | Ethics/DMR/2020/065 | 17.7.2020 |
| 52 | Dr. Ohnmar Kyaw, Research Scientist, Immunology Research Division, DMR  | Immunofluorescent expression of programmed death ligand-1 (PDL-1), potential target for immunotherapy, in oral squamous cell carcinoma  | Ethics/DMR/2020/066 | 17.7.2020 |
| 53 | Dr. Ohnmar Kyaw, Research Scientist, Immunology Research Division, DMR  | Prevalence of Epstein-Barr virus infection with oral squamous cell carcinoma patients attending Dental Oral Medicine Department, University of Dental Medicine, Yangon                            | Ethics/DMR/2020/067 | 17.7.2020 |
| 54 | Dr. Thi Thi Htoon, Head/Senior Consultant Microbiologist, Bacteriology and Parasitology Sections, NHL; Dr. Teruo Kirikae, Professor, Department of Microbiology, Jutendo University school of Medicine, Japan   | Genomic detection of carbapenem and/or colistin resistant Gram-negative pathogens in 4 selected hospitals in Yangon region, Myanmar   | Ethics/DMR/2020/068 | 17.7.2020 |
| 55 | Dr. Bayard Roberts, Professor of Public Health Sociology, London School of Hygiene and Tropical Medicine, Head of Department of Health Services Research and Policy; Dr. Tim Rodes, Professor of Public Health Sociology, London School of Hygiene and Tropical Medicine; Dr. Htun Nyunt Oo, Deputy Director, NAP | Drug Use and Health in Myanmar: Understanding how to improve health interventions for people who use drugs in Myanmar   | Ethics/DMR/2020/069 | 17.7.2020 |
| 56 | Dr. Khin Than Yee, Research Scientist, Biochemistry Research Division, DMR  | Epidemiological and Clinical Profile of Snake Envenoming in Children and Adolescents admitted to Tertiary Hospitals, Yangon, Myanmar  | Ethics/DMR/2020/070 | 17.7.2020 |

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| 57 | Dr. Tun Min, Director ; Dr. Htwe Mya Soe, Assistant Director(MCH/SH/Nutrition), Tanintharyi Regional Health Department | Community Health Services of Auxillary Midwives as Health volumteers in Tanintharyi Region   | Ethics/DMR/2020/071 | 17.7.2020 |
| 58 | Dr. Saint Saint Kyaw Thein, Research Officer, DMR  | Consumption of personal protective equipment and medicines for treating COVID-19 patients at South Okkalapa Specialty Hospital, Yangon                     | Ethics/DMR/2020/072 | 25.7.2020 |
| 59 | Dr. Wah Wah Aung, Director; Dr. Myat Htut Nyunt, Deputy Director, DMR  | Whole Genome Analysis of SARS-CoV2 from Myanmar  | Ethics/DMR/2020/073 | 27.7.2020 |
| 60 | Dr. Myat Tin Htwe Kyaw, Deputy Director/Head, Clinical Research Division, DMR  | Assessment of serum Gastrokine 1 (GKN1) levels among gastric cancer patients admitted to Yangon General Hospital   | Ethics/DMR/2020/074 | 27.7.2020 |
| 61 | Dr. Nandar Ko, Research Officer, Immunology Research Division, DMR (POLB)  | Detection of High Risk Human Papilloma Virus among married women in Myit Kyi Na and Moe Nyin Townships of Kachin State                                     | Ethics/DMR/2020/075 | 27.7.2020 |
| 62 | Dr. Khin La Pyae Tun, Research Scientist, DMR  | CALRETICULIN (CALR) gene mutation in patients with Myeloproliferative Neoplasms (MPNs)   | Ethics/DMR/2020/076 | 27.7.2020 |
| 63 | Dr. Su Latt Tun Myint, Research Scientist, Epidemiology Research Division, DMR (HQ)                                    | Community waste disposal practice and their perceptions towards solid waste management system in peri-urban setting, Yangon Region                         | Ethics/DMR/2020/077 | 27.7.2020 |
| 64 | Dr Aung Ye Naung Win, Research Officer, Epidemiology Research Division, DMR (HQ)                                       | Understanding antibiotic usage for food animals to promote one health approach in rural areas of Ayeyawady Region, Myanmar                                 | Ethics/DMR/2020/078 | 27.7.2020 |
| 65 | Dr. Nyi Nyi Zayar, Research Officer, Epidemiology Research Division, DMR (HQ)  | Awareness of Antimicrobial Resistance and Antibiotics Prescription Pattern among Primary Health Care Providers in Rural Areas of Ayeyawady Region, Myanmar | Ethics/DMR/2020/079 | 27.7.2020 |
| 66 | Dr. Kyaw Thet Aung, Research Officer, Medical Statistics Division, DMR (HQ)  | Assessment of utilization of the Gymnasium Fitness Center in Wanna Theikdi Stadium, Nay Pyi Taw  | Ethics/DMR/2020/080 | 28.7.2020 |

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| 67 | Dr. Kyi Maw Than, Research Scientist, HSR Division, DMR (HQ)   | Knowledge, Attitude and Practice on hospital waste management among staff in Thanlyin General Hospital, East Yangon General Hospital and Yangon City Development Committee's staff in Myanmar"                               | Ethics/DMR/2020/081 | 28.7.2020 |
| 68 | Dr. Thei Thei Moe Han, Research Officer, Pathology Research Division, DMR (POLB)                             | Thyroid Function Status in Newborns Delivered at Central Women Hospital, Mandalay  | Ethics/DMR/2020/082 | 29.7.2020 |
| 69 | Dr. Khin Mi Mi Lay, Deputy Director, Physiology RD; Dr. Thet Thet Mar, Deputy Director, Biochemistry RD, DMR | Association of vitamin D metabolic related genes (FokI and CYP27B1) polymorphism with vitamin D insufficiency/deficiency and increased insulin resistance among staff of Department of Medical Research: Observational study | Ethics/DMR/2020/083 | 14.8.2020 |
| 70 | Daw Phyu Phyu Win, RS, Pathology Research Division, DMR (POLB)   | Comparison of Rapid Diagnostic Test (RDT), Microscopy Method, Polymerase Chain Reaction(PCR) in the diagnosis of malaria among blood donors  | Ethics/DMR/2020/084 | 14.8.2020 |
| 71 | Dr. Lai Lai San, Research Scientist, DMR   | Determination of <i>Clostridium Difficile</i> infection in patients who undergo colonoscopy in Thingangyun General Hospital  | Ethics/DMR/2020/085 | 14.8.2020 |
| 72 | Dr Aye Aye Lwin, Deputy Director, Immunology Research Division, DMR  | Evaluation of dried blood spots as a feasible alternative to plasma for the qualification of hepatitis C virus   | Ethics/DMR/2020/086 | 14.8.2020 |
| 73 | U Mya Moe, Research Officer; Dr. Moe Kyaw Myint, Director, DMR (POLB)  | Detection of asymptomatic malaria infections among migrant mobile people in endemic area   | Ethics/DMR/2020/087 | 14.8.2020 |
| 74 | Dr. Aung Thu, Research Officer, DMR  | Mortality of seasonal influenza and their underlying diseases in Myanmar during 2019   | Ethics/DMR/2020/088 | 14.8.2020 |
| 75 | Dr. Khin Hnin Pwint, Research Scientist, Pharmaceutical Toxicology Research Division, DMR                    | Epidemiology and clinical aspects of pediatric poisonings at major referral children hospitals, Myanmar  | Ethics/DMR/2020/089 | 14.8.2020 |
| 76 | Dr. Khin Moe Aung, Deputy Director, Pathology Research Division, DMR (POLB)                                  | Screening of Prostate Specific Antigen (PSA) in Elderly Men attending Kyauk Yit Station Hospital, Myaung Township: A Pilot Study   | Ethics/DMR/2020/090 | 14.8.2020 |

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| 77  | Dr. Khin Thida Oo, Assistant Director, Department of Public Health   | Assessing the effectiveness of Life-skill education for Sexual and Reproductive Health Rights among adolescent school students and explore the barriers and challenges in education Life-skill curriculum in Health Promoting School in East district, Yangon | Ethics/DMR/2020/091 | 14.8.2020 |
| 78  | Daw Wai Mi Aung, Research Officer, Pharmacology Research Division, DMR (POLB)  | Antibiotic utilization pattern at the poultry husbandries in Mandalay region  | Ethics/DMR/2020/092 | 14.8.2020 |
| 79  | Dr. Moan Thawdar Myo Thant, Consultant (Psychiatrist), Mental Health Hospital  | Psychological distress and new normal ways of life of the urban population during COVID-19 pandemic in Myanmar  | Ethics/DMR/2020/093 | 14.8.2020 |
| 80. | Dr. Mya Mya Aye, Deputy Director, /Head, Bacteriology Resarch Division; Dr. Myo Myo Mon, Deputy Director/Head, Epidemiology Research Division, DMR | Common nosocomial bacterial infections: Prevalence, health care providers' perspectives and challenges  | Ethics/DMR/2020/094 | 20.8.2020 |
| 81  | Dr. Saint Saint Kyaw Thein, Research Officer; Dr. Khin Hnin Pwint, Research Scientist, DMR   | Cost analysis of drug related poisoning in the poison treatment center at New Yangon General Hospital   | Ethics/DMR/2020/095 | 20.8.2020 |
| 82  | Prof: Than Than Aye and Dr. Thet Mar Win, Gastroenterology Department, Yangon General Hospital   | Effect of training of Myanmar gastrointestinal endoscopists in the diagnosis of early gastrointestinal cancer   | Ethics/DMR/2020/096 | 20.8.2020 |
| 83  | Dr. Win Lai May, Deputy Director, DMR  | Trends and associated factors of antibiotic usage at a tertiary level Children Hospital, Yangon Region, Myanmar   | Ethics/DMR/2020/097 | 25.8.2020 |
| 84  | Dr. Yamin Kyaw Thu, Deputy Head of Chin State Health Department, Department of Public Health   | Knowledge, Attitudes and Practices on Tuberculosis Infection Control Measures among the Nurses of the Public Hospitals in Chin State, Myanmar   | Ethics/DMR/2020/098 | 25.8.2020 |
| 85  | Dr. Soe Min Oo, Deputy Director, Department of Sports and Physical Education   | KAP and Perspectives on Doping Among Student Athletes in Institutes of Sports And Physical Education and Elite Athletes in Sports Federations, Myanmar  | Ethics/DMR/2020/099 | 25.8.2020 |

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| 86 | Dr. Myitzu Tin Oung, Deputy Director, Medical Statistics, DMR (POLB)  | Maternal Mortality, Neonatal Mortality and Current Maternal Health Care Utilization in Three Selected Regions of Myanmar   | Ethics/DMR/2020/100 | 27.8.2020 |
| 87 | Daw Nwe Nwe Khin, President, Myanmar Nursing Association  | Factors affecting the attrition of Nursing profession in Myanmar   | Ethics/DMR/2020/101 | 27.8.2020 |
| 88 | Dr. Aye Aye Win, Deputy Director/Head, Experimental Medicine Research Division, DMR   | Occult hepatitis B virus infection (OBI) among pregnant women visiting antenatal clinic at Central Women's Hospital, Yangon  | Ethics/DMR/2020/102 | 27.8.2020 |
| 89 | Dr.Ei Ei Shwe, Consultant Parhologist, Yangon Children Hospital   | Prevalence of Epstein-Barr Virus(EPV) infection in Pediatric Lymphoma in Myanmar   | Ethics/DMR/2020/103 | 27.8.2020 |
| 90 | Professor Moe Moe San, Professor/Head, Department of Tropical Medicine, UM (1)  | Clinical parameters and factors associated with prolonged viral shedding and disease progression among patients with COVID-19 admitted to South Okkalapa Specialist Hospital   | Ethics/DMR/2020/104 | 28.8.2020 |
| 91 | Dr Aung Kyaw Kyaw, Deputy Director; Dr Nyein Nyein Thaung, Research Scientist, DMR (POLB)   | Molecular Epidemiology of Acute Encephalitis Syndrome in Upper Myanmar   | Ethics/DMR/2020/105 | 28.9.2020 |
| 92 | Daw Htwe Htwe, Medical Superintendent, 100 bedded Yangon Traditional Medicine Hospital  | Effectiveness of Herbal paste TMF43 and Egg white combination Therapy in Patients with Knee Joint Pain attending Traditional Medicine Hospital Yangon                          | Ethics/DMR/2020/106 | 1.10.2020 |
| 93 | Dr Ei Ei Swe, Research Officer, DMR (POLB)  | Antimicrobial Resistance: Exploring challenges to inform policy for evidence based actions in prudent use of antibiotics in Myanmar  | Ethics/DMR/2020/107 | 1.10.2020 |
| 94 | Dr. Soe Min Oo, Deputy Director, Department of Sports and Physical Education; Dr. Thiri Htike San, Assistant Director (Sports Medicine Division), Department of Sports and Physical Education | The relationships among iron status biomarkers, dietary intakes, and athletic performance of adolescents attending four Institutes of Sports and Physical Education in Myanmar | Ethics/DMR/2020/108 | 1.10.2020 |
| 95 | Dr. Win Mya Mya Htut, PhD student, Khon Khaen University  | Health literacy and overweight and obesity among working age women in Myanmar  | Ethics/DMR/2020/109 | 1.10.2020 |
| 96 | Daw Su Su Myaing, Research Officer; Dr. Aung Kyaw Kyaw, Deputy Director/Head, DMR (POLB)  | Evaluation of Commercial Rapid Diagnostic Test Kit in Diagnosis of Chikungunya Virus Infection and its genotype identification   | Ethics/DMR/2020/110 | 1.10.2020 |

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| 97  | Dr. Aung Thi, Director(Malaria) NMCP; DPH Dr. Win Han Oo, Senior Program Manager, Burnet Institute  | Optimal community- delivered malaria elimination model for the Greater Mekong Sub-region- Evaluation of the implementation effectiveness and cost-effectiveness of the Community-Delivered Integrated Malaria Elimination(CIME) model: Myanmar | Ethics/DMR/2020/111 | 2.10.2020  |
| 98  | Dr Zin Wai Htay, Master's student, Department of Community and Global Health , School of International Health, The University of Tokyo  | Caregiving Burden among informal caregivers of gastrointestinal cancer patients and their mental well-being in Myanmar: A cross-sectional study  | Ethics/DMR/2020/112 | 2.10.2020  |
| 99  | Dr Kyaw Thet Aung, Research Officer, Medical Statistics Division, DMR   | Prevalence of pregnant women attending the Out Patient Department at Central Womens' Hospital, Myanmar who have been exposed to secondhand smoke and its associated factors  | Ethics/DMR/2020/113 | 16.11.2020 |
| 100 | Daw Kyawt Ngon Phu, Chief Physiotherapist, Myaungmya General Hospital, Thrid Year Phd Student, Human Movement Sciences, Khon Kaen University, Thailand  | Effects of Mindfulness Deep Transverse Friction on Tennis Elbow  | Ethics/DMR/2020/114 | 16.11.2020 |
| 101 | Dr. Phyo Aung Naing, Research Officer, Epidemiology RD, DMR (HQ)  | Assessing knowledge, attitude and practice on health risk behavior and healthy life style among 9th grade and 10th grade students, Yangon Region”  | Ethics/DMR/2020/115 | 16.11.2020 |
| 102 | Dr. Kyaw Ko Ko Htet, Research Scientist, Epidemiology RD, DMR (POLB)  | Active tuberculosis case detection using social pathology characteristics via mobile application in an adult population, Mandalay Region, Myanmar  | Ethics/DMR/2020/116 | 16.11.2020 |
| 103 | Dr. Min Myat Thway, Specialist Assistant Surgeon, YGH; Dr Aye Thida Win, Assistant Lecturer, Department of Forensic Medicine, UM 2  | Determining research participants' perceptions and attitudes regarding informed consent in research  | Ethics/DMR/2020/117 | 22.11.2020 |
| 104 | Dr Lwin Mar Hlaing, AD, National Nutrition Center, Dept of Public Health; Dr Ei Kyar Phyu, MO, National Nutrition Center, Dept of Public Health; Dr Soe Lin Thu, Monitoring and Evaluation Manager, Hellen Keller International, Yangon , Myanmar | Factors influencing COVID-19 related risk and response perceptions and risk mitigation behaviors among the households of Enhanced Homestead Food Production Program in Ayeyarwady and Magway Regions, Myanmar                                  | Ethics/DMR/2020/118 | 28.11.2020 |

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| 105 | Dr Myint Myint Thinn, Senior Consultant Gyne/Oncologist, Central Women Hospital, Yangon; Professor Nwe Mar Tun, Professor and Head, Department of Obstetrics and Gynecology, University of Medicine 1, Yangon | Accuracy of high risk HPV DNA genotyping, cytology and VIA as the triage strategy for HPV positive women in cervical cancer screening                 | Ethics/DMR/2020/119 | 28.11.2020 |
| 106 | Dr. Khin Kant Kaw Oo, Research Officer, Pathology Research Division, DMR (HQ)   | Direct immunofluorescence in diagnosis of glomerular diseases and it's correlation between clinical and histological diagnosis                        | Ethics/DMR/2020/120 | 28.11.2020 |
| 107 | Dr. Yin Min Thwe, Consultant Microbiologist; Dr. Thi Thi Htoon, Senior Consultant Microbiologist, NHL   | Detection of methicillin-resistant gene and toxin-associated genes in Staphylococcus aureus isolates from food handlers working in 4 selected hotels  | Ethics/DMR/2020/121 | 28.11.2020 |
| 108 | Dr Thae Maung Maung, Research Scientist, Medical Statistics Division, DMR (HQ)  | A prospective cohort study investigating maternal, pregnancy and neonatal outcomes for women and neonates infected with SARS-CoV-2 in Myanmar         | Ethics/DMR/2020/122 | 16.12.2020 |
| 109 | Dr Zarni Min Hein, Research Officer, Medical Entomology Research Division, Department of Medical Research   | Impact of COVID 19 pandemic on health care providers towards dengue protection and control activities in selected townships in Yangon Region, Myanmar | Ethics/DMR/2020/123 | 16.12.2020 |
| 110 | Dr. Nanda Myo Aung Wan, Program Manager, Drug Dependency and Research Unit,   | Effectiveness and efficacy of Implementation project on Buprenorphine maintenance treatment for opioid dependence in Myanmar                          | Ethics/DMR/2020/124 | 20.12.2020 |
| 111 | Dr.Thet Thet Mar, DeputyDirector/Head,Biochemistry Research Division, Department of Medical Research; Dr. Thandar linn, Research Officer, Health System Research Division, DMR                                | A community-based reporting system of snake bite in selected townships of Ayeyarwady region: An operational research                                  | Ethics/DMR/2020/125 | 20.12.2020 |
| 112 | Dr Win Yee Mon, Director(Planning), Department of Medical Services; Dr. Nigel Rollins, Scientist, Department of Maternal, Newborn, Child and Adolescent Health, World Health Organization                     | A Multi Country Study of Early Infant Feeding Decisions   | Ethics/DMR/2020/126 | 20.12.2020 |

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| 113 | Dr. Thu Zar Poe, Medical Officer, NHL; Dr Eh Htoo Pe, Director, NHL  | Detection of <i>Cryptococcus neoformans</i> in clinically diagnosed meningitis among HIV patients from Specialist Hospital Mingalardon and Specialist Hospital Thakayta                                 | Ethics/DMR/2020/127 | 23.12.2020 |
| 114 | Dr. Phone Thit, Coordinator, MSF (Holland)   | The burden of advanced HIV disease within a differentiated model of HIV care in Myanmar   | Ethics/DMR/2020/128 | 30.12.2020 |
| 115 | Dr. Kyaw Swa Mya, Associate Professor/Head, Department of Biostatistics and Medical Demography, University of Public Health Yangon; Prof Henry Silverman, University of Maryland Baltimore | Strengthening community engagement to ensure effective and equitable implementation of strategies involving socially vulnerable populations in the response to COVID-19 in Myanmar: A qualitative study | Ethics/DMR/2020/129 | 30.12.2020 |
| 116 | Daw Wai Wai Myint, Officer, Mandalay Regional Health Department  | Perspectives and Challenges of focal persons in the Implementation of Electronic Health Management Information System (eHMIS) at selected Township level in Mandalay Region                             | Ethics/DMR/2020/130 | 30.12.2020 |
| 117 | Dr. Thu Yein Htun, AD, Mandalay Regional Health Department   | Community Perception towards Stray Dog Control and their awareness on prevention of rabies in Mandalay City   | Ethics/DMR/2020/131 | 30.12.2020 |
| 118 | Daw Tin Moe Khaing, Research officer, Immunology Research Division, DMR (POLB)   | Relationship between serum uric acid and body mass index among elderly persons in Pyin Oo Lwin Township   | Ethics/DMR/2020/132 | 30.12.2020 |
| 119 | Prof. Hla Hla Win, Rector, University of Public Health   | Determinants of accessing healthcare among the Elderly in Myanmar in the context of COVID-19 Pandemic   | Ethics/DMR/2020/133 | 31.12.2020 |
| 120 | Daw Su Su Mon, Staff Officer, Social Security Board, Ministry of Labour, Immigration and Population  | Assessment on the Healthcare Service Quality of SSB Contracted Private Clinics under SSB's Health System Reforming Project in Myanmar   | Ethics/DMR/2021/01  | 26.1.2021  |
| 121 | Dr. Aung Soe Htet, Deputy Director, Ministry of Health and Sports  | Risk factors for non-communicable diseases including domestic violence and mental health among urban-rural population of Yangon Region and Chin State, Myanmar: A cross-sectional study                 | Ethics/DMR/2021/02  | 26.1.2021  |
| 122 | Dr. Than Htut Win, Medical Officer, Department of Medical Services   | Myanmar's Health Literacy status and its determinants: a cross-sectional online mixed-methods study   | Ethics/DMR/2021/03  | 26.1.2021  |

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| 123 | Dr.Mo Mo Win, Director, DMR; Dr. Htar Htar Lin, Deputy Director, DPH; Dr.Win Maw Tun, Director, DMR | Immunogenicity and safety of Covishield vaccine in health care workers at Yangon General Hospital and Department of Medical Research | Ethics/DMR/2021/04 | 26.1.2021 |
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**List of proposals reviewed by IRB and deferred till the requirements are fulfilled**

| SN | Principal Investigator(s)  | Title  | IRB Decision | Date      |
|----|--|--|--------------|-----------|
| 1. | Professor Moe Moe San, Department of Tropical Medicine, Yangon General Hospital; U Win Myint, MAMS | Preliminary study on effectiveness of Triphala supplement on clinical outcomes in COVID-19 confirmed non-severe cases  | Deferred     | 4.1.2021  |
| 2. | Professor Min Zaw Oo, Department of Internal Medicine, Thingangyun General Hospital                | An adaptive clinical trial to determine the optimal initial dose of lyophilized, species specific monovalent antivenom for the management of systemic envenoming by <i>Daboia siamensis</i> (Eastern Russell's viper) in Myanmar | Deferred     | 10.1.2021 |

**List of proposal reviewed by IRB but withdrawn as requested by the Principal Investigator**

| SN | Principal Investigator(s)   | Title   | IRB Decision  | Date       |
|----|---|---|---|------------|
| 1. | Professor Frank Smithuis, Director, MOCRU, Medical Action Myanmar | Impact of improved diagnosis tools, practices, training and communication tools on acute fever case management and antibiotic prescriptions at outpatient facilities in Myanmar | Approved to withdraw and termination of IRB review process after Full Board | 10.10.2020 |

**List of proposals reviewed and exempted by IRB due to less than minimal risk**

| SN | Principal Investigator(s)   | Title  | Exempt Number               | Exempt date |
|----|---|--|-----------------------------|-------------|
| 1  | Dr. Myo Myo Mon, Head/ DD, Epidemiology RD; Dr. Thae Maung Maung, Research Scientist, Medical Statistics Division DMR | National COVID-19 Call Centre: Achievements, experiences and challenges  | Ethics/DMR/2020/Exemption-1 | 11.4.2020   |
| 2  | Dr Kyaw Ko Ko Htet, Research Scientist, DMR (POLB)  | A Rapid analysis of Facebook comments regarding public perception on COVID 19 prevention and control activities in Myanmar   | Ethics/DMR/2020/Exemption-2 | 18.6.2020   |
| 3  | Dr. Khin Thet Wai, Director (Retd.), DMR  | Perceptions about Ethics of Public Health Behavioral Interventions during the COVID-19 Outbreak: A multicountry study in Myanmar   | Ethics/DMR/2020/Exemption-3 | 6.7.2020    |
| 4  | Dr. Thida Aung, National Blood Bank   | Seroprevalence of COVID-19 infection among blood donors at National Blood Center   | Ethics/DMR/2020/Exemption-4 | 22.7.2020   |
| 5  | Daw Khaing Khaing Mar, Research Officer, DMR,(POLB)   | Nutritional Composition, Minerals Content and Vitamins in <i>Asparagus officinalis</i> (Ka-Nut) <i>Brassica botrytis</i> (Pan-pwint-sein), <i>Daucus carota</i> (Khar-Gel-U), <i>Lactuca scariola</i> (Salat) and <i>Capsicum frutescens</i> (Nga-yoke-Pu) | Ethics/DMR/2020/Exemption-5 | 14.8.2020   |
| 6  | Daw Lei Lei Win, Research Officer, DMR (POLB)   | Antioxidant and hepatoprotective activity of <i>Scisandra sphenanthera</i> Rehder & E.H Wilson against carbon tetrachloride(CCl <sub>4</sub> ) induced hepatotoxicity in rats  | Ethics/DMR/2020/Exemption-6 | 14.8.2020   |
| 7  | Dr. Pan Ei Soe, Consultant Microbiologist; Dr. Thi Thi Htoon, Senior Consultant Microbiologist, NHL                   | Prevalence of <i>Bacillus cereus</i> and its toxin production in ready to eat food in Yangon   | Ethics/DMR/2020/Exemption-7 | 28.8.2020   |
| 8  | Dr. Khin Than Yee, Research Scientist, Biochemistry RD, DMR   | Proteomic studies on Myanmar Russell's Viper Venom   | Ethics/DMR/2020/Exemption-8 | 28.8.2020   |

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| 9  | Dr. Ywel Nu Nu Khin, Deputy Director, Department of Medical Services  | Patients' satisfaction on health services of secondary and tertiary public hospitals in Myanmar               | Ethics/DMR/2020/Exemption-9  | 28.8.2020 |
| 10 | Dr. Hlaing Myat Thu, Deputy Director General; Dr. Tierra Smiley Evans, Assistant Research Professor, One Health Institute, University of California Davis | Investigation of sero-exposure to SARS-CoV-2 and SARS-CoV-2-like viruses from selected populations in Myanmar | Ethics/DMR/2020/Exemption-10 | 29.8.2020 |