

The Need for Covid- 19 Prevention Training Program and its Effect in Community

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Abstract

This essay discusses the need for Covid 19 prevention training program and its effect to community members. Community training create enabling environment for community members to critically look to their skills, prepares community members to adapt new lifestyle in systematic and in logical manners in how they address the immerging health challenges. Community training stimulates, motivates, empowers and streamline community members to improve quality of their lives and ability to deals with life challenges, particularly in health and personal hygiene. The community training increase health promotion effect and has higher chance of improving how community members may be able to comply and adhere to the instructions of Covid 19 preventions. Community training has an effect on positive attitude and safe community and working environment which also bring good relationship between community members and leaders, employers, employees and visitors of community organizations or places. The community health training fosters collective responsibilities to respond to new health challenges and motivate community members to easily adapt new knowledge and attitude to eliminate diseases of public health importance. The main purpose of this training must be to increase knowledge, skills and improve mental health condition that will influence psychosocial change and remove discouraging factors that has been observed to critically affecting the community and health staff in providing services while fighting Covid-19 to increase vaccine uptake. The training program should use competent trainers with well-planned and structured contents that include specific goal, objectives, and training activities to address mental health; Depression, anxiety, psychological distress and vaccine intake hesitance. The appropriate Pedagogical approaches of training will be able to create effective interaction between trainees and trainers for effective learning that influence changes.

Keywords: Covid-19 prevention, Community training, Community members, Covid-19 vaccination, Mental health, Vaccine hesitance.

Introduction

Covid- 19 is the most devastating health challenge and biggest problem that has hit hard this world since the end of World War II that has killed more people more than any other event [1, 2]. The disease has caused the death of 4.25 million people around the world, yet the disease is still causing loss of lives despite the scientific efforts in providing required treatments and prophylactic measures through Covid-19

vaccines [2, 3]. However, the World Health Organization (WHO) estimated undocumented Covid-19 death as excess death of about 14.9 million took place in 2020 and 2021 [4].

Lack of information from health care worker is identified as one of the reasons for vaccine refusal in Africa and Europe equally that trigger myths and misconceptions that have made the fight against the diseases more difficult [5 ,6]. This situation is a big threat that may lead to

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emerging of new Covid variant that may cause more serious problem to humanity. More people are refusing vaccination, the unique measure to ensure reduction and ultimately elimination of Covid-19 in the world. The Low- and middle-income countries are far away to reach the target in vaccination, whereby in Africa for example, only 15% of its population have been fully vaccinated while vaccines are expiring at vaccination centers throughout the continent due to community resistance to vaccination [7]. Many countries in Africa are yet to reach 10% of their people fully vaccinated [7]. The current education on Covid -19 prevention and Vaccination is mainly through mass media communication with fractions of times of presentation in Television and Radios which is expensive and has little help to community members to make informed decisions [7]. Many people have no regular access to mass media communication which complicate the whole Covid- 19 prevention exercise ineffective. The world is still having long way to go to reach the destination to achieve the reduction of Covid -19. With due regards an alternative way to reduce the disease is needed in combination with Vaccine prophylactic strategy which is current the only golden measure to eliminate the disease. We think that education training program particularly to the communities with high resistance to vaccination activities is now needed to counteract the negative effect of denied vaccination in these community.

The community gathering is where community members meet when engaging with economic or social activities. Community gathering including areas such as workplace or social meeting that presents a good place to communicate educational information for Covid- 19 eradication that may have maximum benefits to individuals with resistance to Covid-19 vaccination and the community at large. The Community training program may also have effect in increasing uptake of Covid-19 vaccination.

The Need for Covid- 19 Prevention Training Program

Training program at community level at this era is useful tool to achieve this development goal of Covid- 19 eradication. The training program is a process by which community members are taught with the required skills and given the important knowledge to change their attitude to enable them to perform their duties while taking care of their changing environments [8]. Community training is a systematic approach to learning and development to improve individual, team, and community effectiveness [8].

The community training process ensures that members meet the acceptable standards in the current socio-economic activities and be responsible of higher and more demanding responsibilities in changing situations for best performance [8, 9]. Currently, many communities are facing challenges, which are related to preventing Covid- 19 transmission and safe community.

In such situation, community training program has crucial role to overcome these problems and to address new and current issues. The community Covid 19 prevention training program is a capacity building plan of making community safe to allow members continue their work for sustainability of the country economy and socio well-being.

Training program is important not only at formal institutions but also at community for people working in industries, offices, and other community organizations [9]. The necessity for establishing community training is important for community members, community leaders, employees, and employers to improve their ways of working to introduce new approaches to work and improve quality of work in the community amid new and current health issues [10, 11]. Every community member is an important individual in preventing Covid- 19 transmission and in ensuring that community is safe for all in accordance with the established National health policy and guidelines of Covid- 19 preventions.

No one is safe unless all are safe. All community members have to be aware of the National health policy and guidelines of Covid- 19 preventions. Members are required to adhere, improve, adopt and reinforce the required skills to interpret the new and current issues accordingly and to implement the current National health policy and guidelines of Covid- 19 preventions to meet its aims, objectives and special requirements. Nevertheless, the need for community training for Covid- 19 prevention and safe environment plays an important role in successful implementation of National health policy and guidelines of Covid- 19 preventions [11]. The training acts like a bridge between community members and Covid- 19 educators to face the new challenges of helping community members to achieve higher standards increasing Covid 19 safe environment, disease prevention, self-protection, and disease understanding.

The community training has for many decades been the tool helping community members comply to new changes that has occurred in community places or works. Organizations need systematic and integrated methods on how to impart, knowledge, skills and ideas which will ultimately change the attitude of community members [11]. The community training is one of the crucial ideas to improve the quality of education and knowledge on how to prevent the spread of Covid- 19 and increase uptake of Vaccines [10, 11].

There are many educational trainings in the communities, however the community training with respect to preventing the spread of Covid - 19 has not been well considered. Constantly using the current and new known knowledge, preventive and technical measures against covid-19 is critical now for individuals and community members [10, 11]. If individuals and community members are to become frontliners against Covid-19 their respective places must provide Covid-19 training program [8, 10].

The Effect of Covid- 19 Prevention Training Program in Community

The community training for Covid 19 prevention should not be taken lightly as time wasting strategies but should be taken seriously by top community leaders and management officials, organization trainers and community members [11]. It obvious that there is increasing need for community training to fight against Covid 19. The need is getting more attention during this period because Covid 19 is increasingly spread worldwide and killing many people with few combating strategies. The community training increase health promotion effect and equip community members with appropriate skills and knowledge and face new challenge of immerging diseases such as Covid 19, to understand on how to prevent themselves and prevent others as well as the care for vulnerable population and steps to take when they get infected [12]. Community health training is more likely to influence how community members may be able to comply and adhere to the instructions of Covid 19 preventions [12]. The community training offers comprehensive personal and professional experience that enable each individual member to become more confidence, competent, and self-determined in addressing his or her challenges [10, 12]. The community training impart knowledge to community members to understand new skills and knowledge and address new challenge. Community training is directed towards creating enabling environment to equip community members with decision making power and become effective in facing their immerging challenges. Community training prepares community members to adapt to new style of life in systematic and in logical manners in how they address the immerging Covid 19 challenge [10]. The in-service training program is useful tool to make community members acquire systematic skills to apply at their community places [3, 10].

When the training is done, individual response is activated to effectively utilize new skills and apply new knowledge and ideas in emerging disease situations and thus improve the quality of health education to community members. The community training fulfills two achievements; attainment of community members to obtain skills and knowledge and ensure personal advancement for each individual participating in training [13]. The community training stimulates, and motivates the achievement of professionalism, empowers community members, and streamlines individuals to improve quality of their ability to deal with life challenges, particularly in health and personal hygiene [13, 14].

Community members who participate in community training always have satisfactory performance at their community or workplace, particularly on application of skills and knowledge after training in areas of issues of concern [13]. It is also discovered that community training has the major effect to improve how to address new and emerging issues for community members [12, 13]. Besides the community training provides community members with new opportunities to come across new techniques, methods, skills and scientific approach to self-protection and protection of others for Covid-19 as part of career advancement [9, 14]. Community training has been also considered as the strategy for changing community members' attitude towards various perspectives and increase compliance to procedures and practice for good health [8:14]. When community members learn effective measures to prevent Covid-19, help create conducive working environment and culture for community members, employers, employees, and visitors [12-14]. Community training provides opportunities for community members to master wider knowledge, techniques and skills to improve effectiveness of their efforts to prevent Covid-19 [12, 14]. For these very good reasons or very good aspect of community training the importance of community training

should not be left without emphasis, but rather being included as one of the community strategic plans to motivate community members, bring positive change and effects. Community training aspect of bringing positive change is since community members will be empowered to correct methods of self-protection and protecting others about Covid 19, and achieve higher compliance to preventing Covid 19 [8, 9]. Community training will not only influence positive attitude, safe community and working environment, but also bring good relationship between community members and leaders, employers, employees, and visitors of community organizations [15].

The effective use of local available resource should be considered and included among teaching methodology to enhance the ability of the community members to understand the education and training contents [16]. Proper arrangements of time for training are unique factors to motivate community members participating in training program. Trainers need to arrange special time for training and avoid using after work hours and long duration training sessions which may have effect on concentration of participants do not take the training seriously [16]. The decision on the training and the scheduling of activities should be done in participatory manner involving community members for decision making to make them prepared and be ready to participate on their own willing. The training can bring changes particularly when community members are trained in well-arranged time schedules, qualified trainers, good training site, appropriate training methodology using local available resources and follow up [17]. Such training brings creativity and possibility for participants to critically identify and evaluate their culture that can help them influence changes to their lives and life of others.

The individuals that undergone training in their local places effectively perform their duties and responsibilities in their areas while effectively utilizing the knowledge gained,

management of their life related issues, and can evaluate their environments for the quality of their lives [18,19,20]. Training of the community member make them adapt systematic lifestyle that is logical for themselves and the people around them. The community training fosters collective responsibilities to respond to new health challenges and motivate community members to easily adapt new knowledge to improve their quality of life [20, 21]. For the training to be successful leadership participation plays an important role. Active involvement of the top management officials and administrators in learning strategies has more effect on psychosocial acceptance of the training program [22].

Mental Health problems, Psychological Distress and Covid-19 Vaccine Hesitancy are among the main obstacles towards Covid -19 prevention achievements [23-25]. Studies conducted worldwide indicate that most of the communities have been challenged by mental health problems and not been able to cope with psychological distress amid outbreak of the Covid-19 epidemic [26-29]. The mental health problem did not only affect the Covid-19 prevention program but also hampered various other various health activities [30-32]. The Mental Health and psychological distress may have great effect against the decisions to combat the epidemic and effected the acceptability and uptake of Covid-19 Vaccine that is currently observed worldwide [33-35]. It, therefore, is very important for the training activities to included and focus on these psychosocial issues of public health importance to improve and ultimately eliminate the Mental Health and psychological distress, which is among the main causes of Covid-19 Vaccine hesitance

Covid-19 Prevention Training program

Studies indicate that the Mental Health, psychological distress, and Covid-19 Vaccine hesitance are interlinked conditions [32-35]. Therefore, it is important that the training sessions should be combined to enable trainees

to be able to understand and establish the link and help them counteract these effects successfully. The way mental health has affected vaccine uptakes should form the basis of training program indicating how these issues have been identified as main hindering factors to fight the epidemic to data [23-25]. The effectiveness of training program depends on effectiveness of trainers who will sufficiently address the mental health challenges, vaccine acceptance and hesitance include professional lessons and advises for Covid -19 prevention program. Mental health problem has affected general communities and health care workers equally that has jeopardies the chance to achieve the elimination strategies [26-28, 30]. In this regard, apart from general community training, training of health care workers should be included as separate training program to address institutional issues pertaining to Covid-19 prevention.

Planning of Training program

The training program should be well planned and conducted in the areas where the community live, places that they associate their feelings and perceptions with respect to fighting Covid-19. The well-planned training program which includes specific goal, objectives, and training activities ensures enrolment and motivate participants. Since that, Mental health; depression, anxiety, psychological distress, and health care intake hesitance has been among the main cause diluting the efforts of Covid -19 prevention, thus, Mental health trainer and psychologists should be among the trainers specifically be included in the training program [29-31]. Health care workers demonstrated mental health problems with considerable psychological distress when performing their duties while coping with heavy and dangerous burden activities of caring patients with Covid-19 [23, 27, 29]. The training of health care workers should be done at their workplaces to address some institutional issues that could have influence the mental health challenges and psychological distress and how to overcome.

The training effectiveness also depend on how Community members and health staffs that taking part in training are sensitized enough of their problems and their willingness to for self-improvement and change their mind to reduce; depression, anxiety, psychological distress and participate in vaccine exercise. The effective participation and involvement in training of mental health trainers and health care professional in planning and implementation of the training is paramount for its success. The vaccine poor acceptance and hesitance in its intake has been observed worldwide without exception and it is largely contributed by psychosocial problems that need to be addressed in the training [33-37].

The world has observed unbelievable mental health problems that almost blocked the efforts of Covid- 19 prevention and even affected other routine health care activities such as routine immunization [37-40]. It was also observed other various obstacles and factors related to psychoses in day-to-day activities during the pick of Covid- 19 infection globally [41, 42]. The fully participation in training of Mental health and the role of Mental health trainers and Psychologists are important to ensure adequate enrollment to sustain the training. It therefore the role of Mental health trainers and Psychologists to influence changes during training. Training on vaccine hesitance and the role of health care professionals on vaccines should be overemphasis because vaccine professionals are the one to clarify issues of concern of safety and effectiveness of Covid- 19 vaccine, while verifying the truths and explaining myth and misconception that hinder vaccine acceptance and uptake.

The main purpose of this training must be to increase knowledge, skills and improve mental health condition that will influence psychosocial change and remove discouraging factors that has been observed to critically affecting the community and health staff in providing services while fighting Covid-19 to increase vaccine uptake. The trainer in this training must

personalize this training while influencing positive mental health construct that will influence change. Mental health and Psychologist will form the leadership to create the supportive atmosphere that is trusted and serve as the role model when conducting training. The training contents should include issues of obstacles to combating Covid-19 and mental health impacts, and coping strategies of Covid-19 pandemic, including the risk perceptions and how individuals and health care workers may be able to cope with [23, 28]. The planning should put more emphasis on how to cope with mental health challenges and psychological distress depression and anxiety [24, 26, 27]. The immediate impact of Covid-19 on mental health should be well outline in planning and include all identified factors associated with mental health and psychological distress in various studies and some National Surveys conducted [27, 29, 31, 32].

The planning lessons will indicate the relationship of mental health challenges and Covid-19 vaccine hesitance. The lesson plan should use global survey of 20 countries and other studies on the factors influencing the acceptability, and drivers of vaccination decision-making and associated factors to inform the planning of training units to combat vaccine hesitance [33-35]. The training emphasis should clarify negative issues and use the potential positive influencing factors of Covid-19 prevention to foster changes among the communities for vaccine acceptability [35-37].

Implementation of Training Program

The training program shall be implemented with well-structured participants assessments procedures, demonstrative materials based on the need of the community. The training approach should base on the training environment, level of education and age of participants. The effective use of the right approach of training, the right contents that is combined with the appropriate objective and

evaluation strategy will definitely influence knowledge among participants. Training technics should follow pedagogical principle to ensure that trained community members have opportunity for self-improvement and help them change their attitudes. The ability and competency of trainers to deliver training contents should be the point of focus during training to ensure that trainees have maximum opportunity to grasp the information being delivered. The information that will be delivered should target the mental health problems: depression, anxiety, and psychological distress issues and vaccine safety, intake hesitance and challenges. The mental health issues under training should be able to impart higher knowledge and skills on Covid-19 prevention and impart positive attitude on their mental state and vaccine acceptance challenges that has been observed [29, 30, 31]. Pedagogical approaches of training venue management, well created training structure or curriculum, while ensuring good listening and observation of the training demonstrations to have possibility of creating responsible feedback from the participant which will enable effective interaction between trainees and trainers for effective learning [16]. The training using of local available teaching materials and resources in delivering training sessions will facilitate understandings of the contents and develop targeted knowledge and skills for Covid-19 prevention, including vaccine acceptance. The choice of teaching materials should be tailored to meet participants expectations to deliver training to achieve its objectives and should be presented in suitable and effective manners for easy understanding [16]. The training time management must meet the need of the trainers. The training sessions should not be too long nor too short to influence self-development and improvement and class sustainability.

Conclusion

The above discussion indicates that community training is among very important

tools for Covid-19 prevention in this time. Community training will enhance community members knowledge and skills to face new and emerging challenges. The main purpose of this training must be to increase knowledge, skills and improve mental health condition that will influence psychosocial change and remove discouraging factors that has been observed to critically affecting the community and health staff in providing services while fighting Covid-19 to increase vaccine uptake. The knowledge and skills acquired by community members ensure that community members play effective role of Covid-19 prevention not only to community member themselves but also to the entire public. The community training increase health promotion effect and equip community members with appropriate skills and knowledge to face new challenge of emerging diseases to understand on how to prevent themselves and prevent others as well as the care for vulnerable population and steps to take when they get. Community health training has higher chance of improving how community members may be able to comply and adhere to the instructions of Covid-19 preventions. Community training will not only have an effect on positive attitude and safe community and working environment, but also bring good relationship between community members and leaders, employers, employees and visitors of community organizations. The community training fosters collective responsibilities to respond to new health challenges and motivate community members to easily adapt new knowledge to improve their quality of life. In order for the training to be successful leadership participation plays an important role. The training program should be well planned conducted in local areas and include specific goal, objectives, and training activities to address mental health, Depression, anxiety, psychological distress, and vaccine intake hesitance. The training emphasis should clarify negative issues and use the potential positive influencing factors of Covid-19 prevention to foster changes among the

communities for vaccine acceptability. The competency of trainers will ensure that trainees have maximum opportunity to grasp the information being delivered for change. The appropriate Pedagogical approaches of training will be able to create feedbacks from the participants with effective interaction between trainees and trainers for effective learning process.

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Reference

[1] Health policy Watch (2022): Independent global Health reporting. Retrieved in April 2022, from <https://healthpolicy-watch.news/?s=covid-19>.

[2] Ugarte, M.P., Achilleos, S., Quattrocchi, A. et al. Premature mortality attributable to Covid-19: potential years of life lost in 17 countries around the world, January–August 2020. *BMC Public Health* 22, 54 (2022). DOI:10.1186/s12889-021-12377-1.

[3] Greg Williams, Angela Spencer, Tracey Farragher, Matthew Gittins, Arpana Verma. Years of life lost to Covid-19 in 20 countries. *Journal of global health*, March 19, 2022. www.jogh.org. DOI: 10.7189/jogh.12.05007.

[4] World health organization (2022). Retrieved in May 2022, from <https://www.who.int/news/item/05-05-2022-14.9-million-excess-deaths-were-associated-with-the-covid-19-pandemic-in-2020-and-2021> on May 2022.

[5] Mouhamadou Faly Ba, Adama Faye, Babacar Kane, Amadou Ibra Diallo, Amandine Junot, Ibrahima Gaye, Emmanuel Bonnet & Valéry Ridde (2022). Factors associated with Covid-19 vaccine hesitancy in Senegal: a mixed study, *Human Vaccines & Immuno-therapeutics*. DOI:10.1080/21645515.2022.2060020.

[6] Chaudhuri, K., Chakrabarti, A., Chandan, J.S. et al. (2022). Covid-19 vaccine hesitancy in the UK: a longitudinal household cross-sectional study. *BMC Public Health* 22, 104 (2022). DOI:10.1186/s12889-021-12472-3

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Conflict of Interest

We declare no conflict of interests in this review article.

[7] WHO. Regional office for Africa (2022). Retrieved in March 2022, from <https://www.afro.who.int/news/africas-covid-19-vaccine-uptake-increases-15>.

[8] Kraiger and J. Kevin Ford Kurt (2021). Annual Review of Organizational Psychology and Organizational Behavior(pdf). *Annual Reviews*. 2021 8:1, 45-72. Retrieved in April 2022, from <https://www.annualreviews.org/doi/pdf/10.1146/annurev-orgpsych-012420-060109>.

[9] Jane Itohan Oviawe, Raymond Uwameiye, Patrick S. O. Uddin. Bridging Skill Gap to Meet Technical, Vocational Education and Training School-Community Collaboration in the 21st Century. *International Journal of Vocational Education and Training Research*. Vol. 3, No. 1, 2017, pp. 7-14. DOI: 10.11648/j.ijvetr.20170301.12.

[10] Iqbal, N., Khan, M.M., Mohmand, Y.T. et al. The Impact of in-Service Training and Motivation on Job Performance of Technical & Vocational Education Teachers: Role of Person-Job Fit. *Public Organiz Rev* 20, 529–548 (2020). <https://doi.org/10.1007/s11115-019-00455-3>. google scholar.

[11] Martha Nkechinyere Amadi (2013). In-Service Training and Professional Development of Teachers in Nigeria: Through Open and Distance Education (pdf). Retrieved in January 2022, from <https://files.eric.ed.gov/fulltext/ED567172.pdf>.

[12] Karatrantou, K., Gerodimos, V., Manouras, N., Vasilopoulou, T., Melissopoulou, A., Mesiakaris, A. F., & Theodorakis, Y. (2020). Health-Promoting

- Effects of a Concurrent Community Training Program in Inactive Office Community member (HealP Community member): A Randomized Controlled Study. *American Journal of Health Promotion*, 34(4), 376–386. DOI:10.1177/0890117119899781.
- [13] Ana LELASHVILI (2014). Examining the Impact of Inservice Training Module in Inclusive Education on Developing Positive Attitude and Awareness of Vocational Education Teachers toward Inclusion (2014) (pdf). Retrieved in March 2022 from <https://www.duo.uio.no/bitstream/handle/10852/40205/Ana-Lelashvili.pdf>?
- [14] Rowe AK, Rowe SY, Peters DH, et al. (2021). The effectiveness of training strategies to improve healthcare provider practices in low-income and middle-income countries *BMJ Global Health* 2021;6:e003229. PubMed | Google Scholar.
- [15] Mary Vincent. (2020). Impact of Training and Development on Employee Job Performance in Nigeria. *Saudi Journal of Humanity and Social Science*: 2020 DOI: 10.36348/sjhss.2020.v05i05.004. PubMed | Google Scholar.
- [16] Hacer Hande Vysal, (2012). Evaluation of An In-Service Training Program for Primary School Language Teachers in Turkey, *Australian Journal of Teacher Education*, Vol. 37. No.7.
- [17] Aytaged Sisay Zeleke, (2012). Continuous Professional Development Program for Higher Education Academics in Ethiopia: Views, Perceived needed Competencies and Organization in Focus, *Greener Journal of Educational Research*, Vol.2 (3).
- [18] Ekpoh, V.I., Oswald, A., & Victoria (2013). Staff Development Programmes and Secondary School Teachers' Job Performance in Uyo Metropolis, Nigeria, *Journal of Education & Practice*, Vol.14, No.12.
- [19] Jahangir, S.F., Saheen, N., & Kazmi, S.F., (2012). In-Service Training: A Contributory Factor Influencing Teachers' Performance, *International Journal of Academic Research in Progressive Education and Development*, Vol.No.1.
- [20] Syed Makhdoom, Khalid Mehmood & Istiaq Hussain, (2011). In-service Training of Secondary Level Teachers: A Follow Up of Teachers' Performance in Comparative Perspective, *Journal of Education and Practice*, Vol.2, No.11 & 12.
- [21] Kazmi, S.F., Pervez, T., Mumtaz, S. (2011). In-Service Teacher Training in Pakistan Schools and Total Quality Management, *Interdisciplinary Journal of Contemporary Research in Business*, March Edition 2011.
- [22] Omar, C. M. Z. C. "The Need for In-Service Training for Teachers and It's Effectiveness in School". *International Journal for Innovation Education and Research*, vol. 2, no. 11, Nov. 2014, pp. 1-9, doi: 10.31686/ijer.vol2.iss11.261.
- [23] Roy Rillera Marzo, Emilio Quilatan Villanueva III, Udit Chandra, Mila Nu Nu Htay, Rajeev Shrestha, Sunil Shrestha (2021). Risk perception, mental health impacts, and coping strategies during Covid-19 pandemic among Filipino healthcare workers. *Journal of Public Health Research*. <https://journals.sagepub.com/doi/full/10.4081/jphr.2021.2604>.
- [24] Roy Rillera Marzo, Vineet Vinay, Rafidah Bahari, Shekhar Chauhan, Deborah Anak Fo Ming, Stephanie Fernandez A/P. Nelson Fernandez, Colin Cornelius Pereira Johnson, Agkesh Kumar A/L Thivakaran, Mohammad Meshbahur Rahman, Sonu Goel (2021). Depression and anxiety in Malaysian population during the third wave of the Covid-19 pandemic. *Clinical Epidemiology and Global Health*, Volume 12, October–December 2021, 100868; <https://doi.org/10.1016/j.cegh.2021.100868>.
- [25] Roy Rillera Marzo,* Zaliha Ismail, Mila Nu Nu Htay, Rafidah Bahari, Roshidi Ismail, Emilio Quilatan Villanueva, III, Akansha Singh, Masoud Lotfizadeh, Titik Respati, Siska Nia Irasanti, Dewi Sartika, Pham Mong, Sarath Lekamwasam, Bikash Bikram Thapa, Burcu Kucuk Bicer, Soe Soe Aye, Karnjana Songwathana, Radwa Abdullah El-Abasiri, Amaluddin Ahmad, Azlina Wati Nikmat, Seyedeh Zeinab Taheri Mirani, Roushney Fatima Mukti, Saira Mehnaz, and Tin Tin Su (2021). Psychological distress during pandemic Covid-19 among adult general population: Result across 13 countries. *Clinical Epidemiology and Global Health*. February 7, 2021. <https://doi.org/10.1016/j.cegh.2021.100708>.

- [26] Roy Rillera Marzo, Akansha Singh, Roushney Fatima Mukti (2020). A survey of psychological distress among Bangladeshi people during the Covid-19 pandemic, *Clinical Epidemiology and Global Health*. January 14, 2021. <https://doi.org/10.1016/j.cegh.2020.100693>.
- [27] Nu Htay MN, Marzo RR, Bahari R, AlRifai A, Kamberi F, El-Abasiri RA, Nyamache JM, Hlaing HA, Hassanein M, Moe S, Abas AL, Su TT (2021). How healthcare workers are coping with mental health challenges during Covid-19 pandemic? - A cross-sectional multi-countries study. *Clin Epidemiol Glob Health*. 2021 May 7:100759. doi: <https://doi.org/10.1016/j.cegh.2021.100759>.
- [28] Fatjona Kamberi, Enkeleda Sinaj, Jerina Jaho, Brunilda Subashi, Glodiana Sinanaj, Kristela Jaupaj, Yllka Stramarko, Paola Arapi, Ledia Dine, Arberesha Gurguri, Juljana Xhindoli, Jorgjie Bucaj, Lorena Alikaj Serjanaj, Roy Rillera Marzo, Mila NuNu Htay (2021). Impact of Covid-19 pandemic on mental health, risk perception and coping strategies among health care workers in Albania - evidence that needs attention. *Clinical Epidemiology and Global Health* Volume 12, October–December 2021, 100824. Doi: <https://doi.org/10.1016/j.cegh.2021.100824>.
- [29] Mila Nu Nu Htay, Roy Rillera Marzo, Ayesha AlRifai, Fatjona Kamberi, Radwa Abdullah El-Abasiri, Jeldah Mokeira Nyamache, Htet Aung Hlaing, Mayada Hassanein, Soe Moe, Tin Tin Su, and Adinegara Lutfi Abas (2020). The immediate impact of Covid-19 on mental health and its associated factors among healthcare workers: A global perspective across 31 countries. *Journal of Global Health*. August 23, 2020. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7649521/>.
- [30] El-Abasiri, R.A., Marzo, R.R., Abdelaziz, H., Boraii, S., Abdelaziz, D.H. (2020). Evaluating the psychological distress of the coronavirus disease 2019 pandemic in Egypt. *European Journal of Molecular and Clinical Medicine*, 2020, 7(5), pp. 1–12. https://ejmcm.com/article_1675.html.
- [31] Titik Respati, Siska Nia Irasanti, Dewi Sartika, Ieva Baniyah Akbar, Roy Rillera Marzo (2020). A Nationwide Survey of Psychological Distress Among Indonesian Residents during the Covid-19 Pandemic. *International Journal of Public Health Science (IJPHS)*. September 2020. <http://ijphs.iaescore.com/index.php/IJPHS/article/view/20609>.
- [32] Roy Rillera Marzo, Emilio Quilatan Villanueva III, Erwin Martinez Faller, and Aries Moralidad Baldonado (2020). Factors Associated with Psychological Distress among Filipinos During Coronavirus Disease-19 pandemic crisis. *Open Access Macedonian Journal of Medical Sciences*. October 2020. <https://www.idpress.eu/mjms/article/view/5146>.
- [33] Roy Rillera Marzo, Absar Ahmad, Md. Saiful Islam, Mohammad Yasir Essar, Petra Heidler, Isabel King, Arulmani Thiyagarajan, Kittisak Jermstittiparsert, Karnjana Songwathana, Delan Ameen Younus, Radwa Abdullah El-Abasiri, Burcu Kucuk Bicer, Nhat Tan Pham, Titik Respati, Susan Fitriyana, Erwin Martinez Faller, Aries Moralidad Baldonado, Md Arif Billah, Yadanar Aung, Shehu Muhammad Hassan, Muhammad Mujtaba Asad, Kareem Ahmed El-Fass, Sudip Bhattacharya, Sunil Shrestha, Nouran Ameen Elsayed Hamza, Pascal Friedmann, Michael Head, Yulan Lin, Siyan Yi. (2022). Perceived Covid-19 vaccine effectiveness, acceptance, and drivers of vaccination decision-making among the general adult population: A global survey of 20 countries. *Plos Neglected Tropical Medicine*. January 28, 2022. <https://doi.org/10.1371/journal.pntd.0010103>.
- [34] Roy Rillera Marzo, Waqas Sami, Md. Zakiul Alam, Swosti Acharya, Kittisak Jermstittiparsert, Karnjana Songwathana, Nhat Tan Pham, Titik Respati, Erwin Martinez Faller, Aries Moralidad Baldonado, Yadanar Aung, Sharmila Mukund Borkar, Mohammad Yasir Essar, Sunil Shrestha & Siyan Yi. (2022). Hesitancy in Covid-19 vaccine uptake and its associated factors among the general adult population: a cross-sectional study in six Southeast Asian countries. *BMC Tropical Medicine and Health*, Volume 50, Article number: 4 (2022). <https://doi.org/10.1186/s41182-021-00393-1>.
- [35] Mohamed Elsayed, Radwa Abdullah El-Abasiri, Khaled T. Dardeer, Manar Ahmed Kamal, Mila Nu Nu Htay, Birgit Abler and Roy Rillera Marzo (2022). Factors Influencing Decision Making Regarding the

Acceptance of the Covid-19 Vaccination in Egypt: A Cross-Sectional Study in an Urban, Well-Educated Sample. *Vaccines* 2022, 10(1), 20; <https://doi.org/10.3390/vaccines10010020>.

[36] Roy Rillera Marzo, Absar Ahmad, Khadijah Abid, Asmita Priyadashini Khatiwada, Ali Ahmed, Thin Mon Kyaw, Insyirah Bt Zainal Abidin, Metahra Srithar, Sathiajothi Sinnathamby, Arivalagan Palani Sarvasundram, and Sunil Shrestha (2021). Factors influencing the acceptability of Covid-19 vaccination: A cross-sectional study from *Malaysia. Vacunas Journal*. 2021 Sep 1; doi: 10.1016/j.vacun.2021.07.007.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8407950/>,

<https://www.sciencedirect.com/science/article/pii/S1576988721000479#>.

[37] King, I.; Heidler, P.; Marzo, R.R. (2021). The Long and Winding Road: Uptake, Acceptability, and Potential Influencing Factors of Covid-19 Vaccination in Austria. *Vaccines* 2021, 9, 790. <https://doi.org/10.3390/vaccines9070790>.

[38] Johor Bahru. Hamidah Bt Hussin, Roy Rillera Marzo, Nurazura Binti Mamat, Nor Faradilla Binti Safee, Norzita Binti Omar, and Tan Sin Yin (2020). The Barriers of Child Immunization Completion among Parents in the Community Health Centre. *Journal of Pharmaceutical Research International*, 32(4): 48-58, 2020; Article no. JPRI.55983, ISSN: 2456-9119.

<http://www.journaljpri.com/index.php/JPRI/article/view/30425>.

[39] Hamidah B. Hussin, Roy Rillera Marzo (2020). A Literature Review of Parental Barriers to Child Immunization. *Journal of Critical Reviews. JCR*. 2020; 7(3): 642-646 DOI: 10.31838/jcr.07.03.112. ISSN- 2394-5125 Vol 7, Issue 3, 2020. Available at: <http://www.jcreview.com/index.php?fulltxt=93857>.

[40] Ghatak, N.; Marzo, R. R.; Saleem, S. M.; Sharma, N.; Bhattacharya, S.; Singh (2020). Impact on routine immunization services during the lockdown period in India: Implications and future recommendations. *A. European Journal of Molecular and Clinical Medicine*; 7(5):35-40, 2020. https://ejmcm.com/article_1678.html.

[41] Rashida Pervin, Rehana Parvin, Md. Ashraful Babu, Md. Mortuza Ahmmed, Roy Rillera Marzo (2021). The obstacles to combat against Covid-19 pandemic and the remedies: Bangladesh scenario. *Journal of Public Health Research*. Doi: <https://journals.sagepub.com/doi/full/10.4081/jphr.2021.26271>.

[42] Roy Rillera Marzo, Soe Soe Aye, Thein Win Naing, Thin Mon Kyaw, Myat Thida Win, Htoo Htoo Kyaw Soe, Minn Soe, Ye Wint Kyaw, Maung Maung Soe, Nay Linn (2021). Factors Associated with Psychological Distress Among Myanmar Residents During Covid-19 Pandemic Crises. *Journal of Public Health Research*. Doi: <https://journals.sagepub.com/doi/full/10.4081/jphr.2021.2279>.