



A Systematic Review of Dynamic Forces as Regards Mask Non-Adherence in Healthcare and Community Settings

Shafti SS*

Professor of Psychiatry, University of Social Welfare and Rehabilitation Sciences, Iran

***Corresponding author:** Saeed Shoja Shafti; M.D, Full Professor of Psychiatry, University of Social Welfare and Rehabilitation Sciences (USWR), Razi Psychiatric Hospital, Tehran, Iran, Postal code: 18669-58891, Po Box: 18735-569; Tel: 0098-21-33401220; Fax: 0098-21-33401604; Email: sshafti@gmail.com

Review Article

Volume 5 Issue 1

Received Date: April 07, 2021

Published Date: April 20, 2021

DOI: 10.23880/mhrij-16000141

Abstract

Although vaccination is the first-line strategy controlling and preventing SARS-CoV-2, personal protective measures, such as wearing facemasks, are also important preventive behaviors to reduce the risk of becoming infected with viral infections during a pandemic. While medication non-compliance is a common issue for clinicians, non-compliance with shielding measures, like wearing facemasks, for prevention of infection in healthcare and community settings is rather a new problem. On the other hand, while medication non-adherence has more an individual characteristic, non-compliance with protective methods for prevention of contamination has more a social feature. In this regard, though, maybe, neither of existing shielding measures nor the proposed strategies may promise a complete protection against the biotic dangers, certainly acting in accordance with the safety methods will increase the popular protection and health. But, why some of the people avoid shielding exercises and what is wrong with the reasonableness and awareness that is expected to be revealed by all citizens? How the morbid cycle of spreading of communicable diseases can be obstructed or weakened when the masses do not have faith in favorable recommendations that are issued by the most authentic universal administrations, like World Health Organization, or the reliable and answerable native health executives. In the present article, after reviewing the background of non-compliance in medicine, and chronology of wearing facemasks for prevention of infection in community settings, the route of transmission of SARS-CoV-2 (COVID-19), and evidential analysis of community masking has been talked over. In addition, after appraisal of plausible interconnected psychodynamic and/or psychopathologic factors, the problem solving strategies, like increasing awareness through education and feedback, and necessity of collaboration between health care practitioners and people, has been stressed. While the promotion of compliance must be the responsibility of both the health care professional and the populace, right interventions for targeting public misunderstandings about recommended shielding maneuvers can reduce preventable infection rates during pandemic, and no longer must the people be viewed as the only guilty party.

Keywords: COVID-19; SARS-CoV-2; Pandemic; Non-Compliance; Masks; Facemasks; Protection of the Wearer; Source Control; Community Transmission

Abbreviations: WHO: World Health Organization.

Introduction

While medication non-compliance is a common issue for clinicians [1-4], non-compliance with shielding measures, like wearing facemasks, for prevention of infection in healthcare and community settings is rather a new problem [5,6]. On the other hand, while medication non-adherence has more a personal characteristic, non-compliance with protective methods for prevention of contamination has more a social feature. In this regard, though, maybe, neither of existing shielding measures nor the proposed strategies may promise a complete protection against the biotic dangers, certainly acting in accordance with the safety methods will increase the popular protection and health [7]. But, why some of the people avoid shielding exercises and what is wrong with the reasonableness and awareness that is expected to be revealed by all citizens? How the morbid cycle of spreading of communicable diseases can be obstructed or weakened when the masses do not have faith in favorable recommendations that are issued by the most authentic universal administrations, like World Health Organization (WHO), or the reliable and answerable native health executives [7].

Background of Non-compliance in Medicine

While medication non-adherence, defined as a patient's passive failure to follow a prescribed drug regimen, remains a significant concern for healthcare professionals and patients, on average, one third to one half of patients do not act in accordance with the recommended treatment programs, and W.H.O, as well, noting that the average non-compliance rate is 50% among those with chronic ailments. In addition, consequences of non-adherence include increased health care costs, increased comorbid diseases, worsening condition, and death. Non-adherence results from many causes, like the issue of autonomy, misunderstanding, awkward interaction between patient and physician, poor socioeconomic background, lack of family and social support, lack of motivation, youngness, oldness, and female gender [8].

History of Wearing Facemasks for Prevention of pandemic

Wu LT [9] effort to control the 1910 Manchurian Plague has been admired as a milestone in the systematic practice of epidemiological principles in infection control, in which Wu LT [9] identified the cloth mask as the prime means of personal protection. Though Wu LT [9] planned the cloth mask that was used through most of the world in the early 20th century, he pointed out that the airborne spread of plague was acknowledged since the 13th century, and face coverings were suggested for protection from respiratory

epidemics since the 14th century [9]. Wu LT [9] recounted tryouts that revealed a cotton mask was operative at stopping airborne communication, plus observational proof of usefulness for health care staffs. Masks have continued to be commonly used to control spread of respiratory infections in East Asia through to the present day, including for the COVID-19 epidemic [10].

Route of transmission of SARS-CoV-2 (COVID-19)

Infection is spread primarily through exposure to respiratory droplets exhaled by infected people when they cough, sneeze, breathe, talk, or sing. Most of these droplets are $<10 \mu\text{m}$ (aerosols), and the amount of these fine droplets and particles increases with volume of speech (e.g., loud talking, shouting) and respiratory exertion (e.g., exercise) [11]. A primary route of spread of COVID-19 is by means of respiratory particles, and it is recognized to be communicable from presymptomatic, paucisymptomatic, and asymptomatic persons [8]. In any case, forty-five percent of infected people are estimated to never develop symptoms. Among people who do develop symptomatic disease, transmission risk peaks in the days in advance beginning of symptoms (presymptomatic infection) and for a few days afterwards. So, the number of contaminations transmitted peaks when virus levels peak. So, more than half of all infections are transferred from persons who are not showing symptoms. This means, no less than half of new pollutions come from people likely unaware that they are infectious to others [12,13]. Cloth masks block most large ($>20\text{-}30 \mu\text{m}$) exhaled respiratory droplets and Multi-layer cloth masks substantially block respiratory droplets $<1\text{-}10 \mu\text{m}$, which include the greatest fraction of exhaled respiratory droplets, and reductions as high as 50-70%; some on the same level with surgical masks [14].

On the other hand, while their act on filtration of breathe in small droplets is not equal to their performance about blocking exhaled small droplets, enhancement is probable with more layers, multiple materials, Static charge, or hydrophobic ingredients [15]. Multi-layer cloth masks can both block up to 50-70% of the said droplets [16] and limit the forward spread of those that are not caught [17]. So, cloth masks are comparable to surgical masks when used together for community control (i.e., when combined for both source control and personal protection) [18]. It is particularly important to wear a mask when you are inside with persons you do not live with and when you are not capable to stay at least 6 feet apart, since SARS-CoV-2 spreads mainly among people who are in close contact with one another [19]. Besides, wearing a mask does not raise the carbon dioxide (CO_2) level in the air you breathe because CO_2 molecules are small enough to easily pass through any cloth mask material.

In contrast, the respiratory droplets that carry the virus that causes COVID-19 are much larger than CO₂, so they cannot pass as easily through a correctly designed and suitably worn cloth mask [18].

Evidential Analysis of Community masking

Systematic review of literature offers evidence in favor of widespread mask use as source control to reduce community transmission [20-31] (Table 1). This is in spite of finding of MacIntyre CR, et al. [23] that cloth masks were statistically no better than the control situation and inferior to surgical masks against upper respiratory illness and viral infection, which due to a number of methodical difficulties, including absence of SARS-CoV-2 infection, lack of a true “no mask” group, performing study in a healthcare setting and not a general community setting, and open policy, is not generalizable to community masking [32,33]. Methodical

studies have proved that non-medical masks have been effective in reducing transmission of respiratory viruses; and places and time periods where mask usage is required or pervasive have revealed significantly lower community spread [20-31]. The existing proof advocates that near-universal adoption of non-medical masks when out in public, in combination with corresponding public health measures, could magnificently decrease the average number of persons infected by one person in a population (Re) to below 1, thus reducing community spread if such measures are continual [8]. Also, results suggest that public mask wearing is most effective at reducing spread of the virus when compliance is great [34]. When used in tandem with contact tracing, quarantining of anyone that may be infected, widespread testing, hand washing, and physical distancing, face masks are a valuable instrument to decrease community transmission [35].

Scholar	Year	Method	Findings
Chu DK, et al. [20]	2020	Systematic review	Face mask use could result in a large reduction in risk of infection.
Jefferson T, et al. [21]	2011	Cochrane review	Overall masks were the best performing intervention across populations, settings and threats.
Jefferson T, et al. [22]	2020	Systematic review	There was insufficient evidence to provide a recommendation on the use of facial barriers without hand hygiene and physical distancing.
MacIntyre CR, et al. [23]	2020	Systematic review	Community mask use could be beneficial for well people, and as source control.
Gupta AM, et al. [24]	2020	Systematic review	Homemade masks worn by sick people can reduce virus transmission by mitigating aerosol dispersal and droplets.
Brainard JS, et al. [25]	2020	Systematic review	Face masks in a general population offered significant benefit in preventing the spread of respiratory viruses especially in the pandemic situation.
Leffler CT, et al. [26]	2020	Multiple regression	Transmission was 7.5 times higher in countries that did not have a mask mandate or universal mask use
Kenyon C [27]	2020	Multiple regression	Transmission was 7.5 times higher in countries that did not have a mask mandate or universal mask use
Lyu W, et al. [28]	2020	Ecological survey	Daily growth rate of infection in USA was 2.0 percentage points lower in states with mask mandates
Hatzius J, et al. [29]	2020	Multiple regression	Face masks have a large reduction effect on infections and fatalities
Leung NHL, et al. [30]	2020	laboratory-based evidence	Household masks have filtration capacity in the relevant particle size range, as well as efficacy in blocking aerosols and droplets from the wearer
Ippolito M, et al. [31]	2020	Epidemiological study	Face masks with valves do not capture respiratory particles as efficiently, bypassing the filtration mechanism, and therefore offer less source control

Table 1: Scientific Evidence in favor of Benefit of Community Masking 20-31.

Discussion

While insight depends on theoretic knowledge and practical training, hypothetical understanding cannot be

inventive if it is not escorted with full intellectual capacity and understanding of core conception. Then again, applied preparation, as well, cannot be profitable if it is not enhanced

with concrete documents in real surroundings. These two processes, which form the core curriculum of every academic preparation, can be operative publicly, as well, if target groups be designated wisely. On the other hand, while tutoring about biotic dangers and associated precautionary stratagems are among the basic lessons of physicians and clinical staffs, resistance against defensive guidelines and policies is clear, more or less, in some GPs, specialists and workforces, too, which makes them as like as uneducated laypeople with respect to ignorance of a gloomy cycle that demands community participation for successful control or final elimination [7].

Disregard to plausible psychological factors, like hopelessness and helplessness, which can be induced by overwhelming disasters and may intrude sensible judgment of every person, it must not be overlooked that collective, logical or scientific insight is still controllable by cultural ideals, which can undermine subjective discernment, especially if there is conflict between inner faiths and external proofs. However, within the social order, noncompliance to protective measures may speed up distribution of transmissible infections, and when it is being performed by a person, who based on ideal subjective beliefs disregard the public safety, it is not just neglect or bias; it is approximating to massacre. The condition is similar to transportation rubrics that everyone should comply with, even if he or she hates them, and should pay back if cause injuries or mortalities because of breaking the instructions.

Public guidelines have been devised in the best interests of collective life [7]. Some of the psychodynamic issues that may pertain to non-compliance with safety measures or recommendations involve: Image of illness and weakness; negative experience of others in spite of usage; unknown side effects due to that; unconscious illness tendencies; countertransference to administrates, administrators or health staff; useless instrument; claustrophobia; specific phobia; unconscious sense of guilt; unconscious wish of death [36,37].

Likewise, some of the psychopathologic problems that may pertain to the aforesaid non-compliance, together with their prevalence in community, consist of: personality traits or disorders, like paranoid (2.3-4.4%), schizotypal (0.6-4.6%), narcissistic (0-6.2%), antisocial (0.2-3.3%), histrionic (1.84%), obsessive - compulsive (2.1-7.9%), passive - aggressive (negativistic), sadistic-aggressive, sadistic-masochistic, and depressive personality disorder; cognitive problems, like intellectual disability (1%) or borderline intellectual functioning (6%); disruptive, impulse-control, and conduct disorders, like oppositional defiant disorder (3.3%), conduct disorder (4%); depression (5%); bipolar disorder (0.4%); attention-deficit/hyperactivity disorder

(5% children, and 2.5% adults); schizophrenia spectrum and other psychotic disorders, like persecutory type of delusional disorder (0.2%) [38,39].

While the said problems can predispose the state of mind for taking opposite attitude against wearing facemasks or other shielding measures for prevention of infection in healthcare and community settings, it does not mean that every non-complainer is psychiatrically sick. Some of them may just follow their sect's rules [40], as a faithful believer. In DSM-5, sects has been discussed in the subdivision of 'Other Conditions That May Be a Focus of Clinical Attention', which covers other situations and difficulties that may be a focus of clinical care or that may otherwise affect the diagnosis, progression, prospects, or management of a patient's mental illness [41]. Cults are often led by magnetic leaders, and their followers are powerfully controlled and forced to disband commitment to family and society to serve the cult leader's commands and recommendations [41]. There are many sects and fans that have faith in strange healers, like shamans, faith healers, naturopaths, and witchdoctors, which seem godlike and free from mistakes or limitations of conventional medicine.

While generally sects include a combination of educated and illiterate devotees, faith in unlimited power is a general wish that may influence everyone, because it creates hopefulness, which is irreplaceable, outstanding and extremely rare. Then again, some of the non-complainers are neither mentally sick or sect's devotee; they are people who demand robust proof in support of effectiveness of protective measures, which are in use for controlling viral infections like, influenza, influenza-like illness, SARS-CoV, and SARS-CoV-2 transmission. Also, they may concern, ideologically or idealistically, free will and independence. While data regarding the "real-world" effectiveness of community masking are limited to observational and epidemiological studies [18,32], experimental statistics support community masking to decrease the spread of SARS-CoV-2 [16,42]. Also, the prevention benefit of masking is derived from the combination of source control and personal protection for the mask wearer [43,44].

The connection between source control and personal protection is likely harmonizing and conceivably synergistic, so that personal profit surges with increasing community mask use [45-47]. No doubt, further research is needed to expand the existing proof for the protective effect of cloth masks and in particular to find the combinations of materials that maximize both their blocking and filtering efficacy, along with fit, ease, resilience, and consumer appeal [48]. Adopting universal masking strategies can help stop future lockdown, especially if combined with other non-pharmaceutical interferences such as hand hygiene, adequate ventilation

and social distancing [18]. Anyhow, as said by Taylor and Asmundson [5], results about aversion to being forced to wear masks are significant for the reason that, tentatively, such hatred is likely to strengthen other anti-masks outlooks (e.g., dogmas that masks are ineffective) because people with strong aversion react with rage and counter-arguments when their opinions are confronted, thereby leading to a strengthening of their anti-mask theories. On the other hand, as stated by Sim SW, et al. [6] Complex interventions that use multipronged approaches targeting the five components of the Health Belief Model, especially perceived susceptibility, are needed to increase the use of facemasks in the community [6]. On the word of Sim SW, et al. [6] persons are more probable to wear facemasks owing to perceived susceptibility and perceived severity of being afflicted with life-threatening ailments.

Though perceived susceptibility looked to be the most important factor determining compliance, perceived benefits of mask-wearing was found to have momentous effects on mask-wearing compliance too. Perceived barriers include experience or perception of subjective discomfort and sense of humiliation. Media blitz and public health promotion activities supported by government agencies provide cues to increase the public's usage of facemasks [6]. Likewise, Zhang et al. found four general dimensions of facemask wearing:

- Perceived susceptibility and seriousness of contagious pandemic,
- Modifying factors (e.g., social responsibility to prevent contamination),
- Cues to action (e.g., seeing others doing it), and
- Perceived benefits and barriers (e.g., protects oneself and others, difficult to breathe) [49].

Lastly, similar to medication non-compliance, while increasing awareness through education and feedback, and collaboration between health care practitioners and people, with the goal of achieving optimal health outcomes must be acknowledged as proper policies, people must no longer be viewed as the guilty party. The promotion of compliance must be the responsibility of both the health care professional and the populace.

Conclusion

Although vaccination is the first-line strategy controlling and preventing SARS-CoV-2, personal protective measures, such as wearing facemasks, are also important preventive behaviors to reduce the risk of becoming infected with viral infections during a pandemic [49]. Controlled laboratory-based experimental studies, epidemiological investigations, and population-level community studies have proved that cloth masks reduce community exposure to SARS-CoV-2, and offer both source control and personal protection.

Though the relationship is likely complementary and possibly synergistic, community benefit derives from the combination of these effects and personal benefit increases with increasing community mask use. Wearing masks by both the infected and uninfected person gives the uninfected person the most protection. Universal masking policies can help especially if combined with other non-pharmaceutical interventions such as social distancing, hand hygiene, and adequate ventilation [18,50]. On the other hand, right interventions for targeting public misunderstandings about recommended shielding maneuvers can reduce preventable infection rates during pandemic. No society can survive without communal concern and supportive corporation. Inconsiderate conduct of a civilian, due to own contemplates, is not permissible, since subjectivity is immeasurable, while objectivity has clear frontiers and indications. Switching group partiality to communal impartiality is a necessity if public triumph is a shared wish. Every civilian must be intelligent enough to distinct between cultural values and professional ethics, traditions and guidelines, individual contemplates and social necessities, subjective verdicts and general decrees, messy schemes and methodical tactics, personal interests and public welfare, gossips and proofs, unempirical findings and scientific discoveries, and lastly, emotive vision and logical understanding; else, biotic threats may find lots of free camouflaged agents, which can be more threatening and harmful than the principal hazard.

References

1. Evans L, Spelman M (1983) The problem of non-compliance with drug therapy. *Drugs* 25(1): 63-76.
2. Baumann M, Trincard M (2002) Autonomy attitudes in the treatment compliance of a cohort of subjects with continuous psychotropic drug administration. *Encephale* 28(5): 389-396.
3. Lindberg HMJ, Andersen SE, Christensen HR, Kampmann JP (2008) Compliance to drug prescriptions. *Ugeskr Laeger* 170(22): 1912-1916.
4. Chisholm-Burns MA, Spivey CA (2012) The 'cost' of medication nonadherence: consequences we cannot afford to accept. *J Am Pharm Assoc* 52(6): 823-826.
5. Taylor S, Asmundson GJG (2021) Negative attitudes about facemasks during the COVID-19 pandemic: The dual importance of perceived ineffectiveness and psychological reactance. *PLoS One* 16(2): 0246317.
6. Sim SW, Moey KSP, Tan NC (2014) The use of facemasks to prevent respiratory infection: a literature review in the context of the Health Belief Model. *Singapore Med J* 55(3): 160-167.

7. Shoja Shafti S (2020) Necessity of Educational Reconsideration with Reference to Shielding Responsibilities. *Scholarly Journal of Psychology and Behavioral Sciences* 4(1): 410-411.
8. Howarda J, Huangc A, Lid Z, Tufekcie Z, Zdimalf V, et al. (2021) An evidence review of face masks against COVID-19. *PNAS* 118(4): 1-12.
9. Wu L (1926) *A Treatise on Pneumonic Plague*. League of Nations, Health Organization, pp: 373-398.
10. Cowling BJ, Taslim Ali S, WY Ng T, Tsang TK, C M Li J, et al. (2020) Impact assessment of non-pharmaceutical interventions against coronavirus disease 2019 and influenza in Hong Kong: An observational study. *Lancet Public Health* 5(5): 279-288.
11. Alsved M, Matamis A, Bohlin R, Bengtsson PE, Fraenkel CJ, et al. (202) Exhaled respiratory particles during singing and talking. *Aerosol Sci Technol* 54(11): 1245-1248.
12. Johansson MA, Quandelacy TM, Kada S (2021) SARS-CoV-2 Transmission From People Without COVID-19 Symptoms. *JAMA Network Open* 4(1): 2035057.
13. Byambasuren O, Cardona M, Bell K, Clark J, McLaws ML, et al. (2020) Estimating the extent of asymptomatic COVID-19 and its potential for community transmission: Systematic review and meta-analysis. *J Assoc Med Microbiol Infect Dis Can* 5(4): 223-234.
14. Chughtai AA, Seale H, Macintyre CR (2020) Effectiveness of Cloth Masks for Protection against Severe Acute Respiratory Syndrome Coronavirus 2. *Emerg Infect Dis* 26(10): 200948.
15. Gandhi M, Beyrer C, Goosby E (2020) Masks Do More Than Protect Others during COVID-19: Reducing the Inoculum of SARS-CoV-2 to protect the Wearer. *J Gen Intern Med* 35(10): 3063-3066.
16. Moghadas SM, Fitzpatrick MC, Sah P, et al. (2020) The implications of silent transmission for the control of COVID-19 outbreaks. *Proc Natl Acad Sci USA* 117(30): 17513-17515.
17. Abkarian M, Mendez S, Xue N, Yang F, Stone HA (2020) Speech can produce jet-like transport relevant to asymptomatic spreading of virus. *Proc Natl Acad Sci USA* 117(41): 25237-25245.
18. (2021) *Guidance for Wearing Masks*. Center for Disease Control and Prevention.
19. Sousa-Pinto B, Fonte AP, Lopes AA, Oliveira B, Fonseca JA, et al. (2020) Face masks for community use: An awareness call to the differences in materials external icon. *Respirology* 25(8): 894-895.
20. Chu DK, Akl EA, Duda S, Solo K, Yaacoub S, Schünemann HJ (2020) Physical distancing, face masks, and eye protection to prevent person-to-person transmission of SARS-CoV-2 and COVID-19: A systematic review and meta-analysis. *Lancet* 395(10242): 1973-1987.
21. Jefferson T, Del Mar CB, Dooley L, Ferroni E, Al-Ansary LA, et al. (2011) Physical interventions to interrupt or reduce the spread of respiratory viruses. *Cochrane Database Syst Rev* 7: 006207.
22. Jefferson T, Jones M, Al Ansari LA, Bawazeer GA (2020) Physical interventions to interrupt or reduce the spread of respiratory viruses. Part 1-Face masks, eye protection and person distancing: Systematic review and meta-analysis. *MedRxiv*.
23. MacIntyre CR, Chughtai AA (2020) Rapid systematic review of the efficacy of face masks and respirators against coronaviruses and other respiratory transmissible viruses for the community, healthcare workers and sick patients 108: 103629.
24. Gupta AM, Gupta K, Gupta S (2020) The use of facemasks by the general population to prevent transmission of Covid 19 infection: A systematic review. *Medrxiv*.
25. Brainard JS, Jones N, Lake I, Hooper L, Hunter P (2020) Facemasks and similar barriers to prevent respiratory illness such as COVID-19: A rapid systematic review. *MedRxiv*.
26. Leffler CT, Ing E, Lykins JD, Hogan MC, McKeown CA, et al. (2020) Association of country-wide coronavirus mortality with demographics, testing, lockdowns, and public wearing of masks. *Am J Trop Med Hyg* 103(6): 2400-2411.
27. Kenyon C (2020) Widespread use of face masks in public may slow the spread of SARS CoV-2: An ecological study. *MedRxiv*.
28. Lyu W, Wehby GL (2020) Community use of face masks and COVID-19: Evidence from a natural experiment of state mandates in the US. *Health Affairs* 39(8): 1419-1425.
29. Hatzius J, Struyven D, Rosenbery I (2020) Face masks and GDP. Goldman Sachs Research.
30. Leung NHL, Chu DKW, Shiu EYC, Chan KH, McDevitt JJ, et al. (2020) Respiratory virus shedding in exhaled breath and efficacy of face masks. *Nat Med* 26: 676-680.

31. Ippolito M, Iozzo P, Gregoretti C, Grasselli G, Cortegiani A (2020) Face piece filtering respirators with exhalation valve should not be used in the community to limit SARS-CoV-2 diffusion. *Infect Contr Hosp Epidemiol* 15: 1-2.
32. CDC (2020) The Science of Masking to Control COVID-19.
33. MacIntyre CR, Chughtai AA (2015) Facemasks for the prevention of infection in healthcare and community settings. *BMJ* 350: 694.
34. Tian L, Li X, Qi F, Tang QY, Tang V, et al. (2020) Calibrated intervention and containment of the COVID-19 pandemic. *ArXiv*.
35. Rader B, White LF, Burns MR, Chen J, Brilliant J, et al. (2021) Mask-wearing and control of SARS-CoV-2 transmission in the USA: a cross-sectional study. *Lancet Digital Health* 3(3): 148-157.
36. Bush F, Auchincloss EL (1995) *The Psychology of Prescribing and Taking Medication in: Schwartz HJ, Bleiberg E, Weissman SH (Eds.), Psychodynamic Concepts in General Psychiatry. American psychiatric press, Inc. Washington DC, pp: 401-416.*
37. Shoja Shafti S (2020) *Psychoanalytic Analysis of Psychopathology. 2nd (Edn.), Tehran, Jami Publishing Company.*
38. (2013) *Diagnostic and Statistical Manual of Mental Disorders. 5th (Edn.), Washington, DC: American Psychiatric Association, pp: 31-708.*
39. Harrison P, Geddes J, Sharpe M (2010) *Lecture Notes: Psychiatry. 10th (Edn.), West Sussex, UK: John Wiley & Sons Ltd.*
40. Shoja Shafti S (2020) Narcissism: Groundwork for Sectarian Misdemeanors. *Int J Psychiatr Ment Health* 2: 8-16.
41. Sadock BJ, Sadock VA, Ruiz P (2015) *Other Conditions that May be a Focus of Clinical Attention: Cults. KAPLAN & SADOCK'S Synopsis of Psychiatry. 11th (Edn.), Wolters Kluwer, Philadelphia pp: 812-823.*
42. Bahl P, Bhattacharjee S, de Silva C, Chughtai AA, Doolan C, et al. (2020) Face coverings and mask to minimise droplet dispersion and aerosolisation: a video case study. *Thorax* 75(11): 1024-1025.
43. Asadi S, Wexler AS, Cappa CD, Barreda S, Bouvier NM, et al. (2019) Aerosol emission and superemission during human speech increase with voice loudness. *Sci Rep* 9(1): 2348.
44. Morawska L, Johnson GR, Ristovski ZD, Hargreaves M, Mengersen K, et al. (2009) Size distribution and sites of origin of droplets expelled from the human respiratory tract during expiratory activities. *Aerosol Sci* 40(3): 256-269.
45. Rengasamy S, Eimer B, Shaffer RE (2010) Simple respiratory protection—evaluation of the filtration performance of cloth masks and common fabric materials against 20-1000 nm size particles. *Ann Occup Hyg* 54(7): 789-798.
46. Konda A, Prakash A, Moss GA, Schmoltdt M, Grant GD, et al. (2020) Aerosol Filtration Efficiency of Common Fabrics Used in Respiratory Cloth Masks. *ACS Nano* 14(5): 6339-6347.
47. Hill WC, Hull MS, MacCuspie RI (2020) Testing of Commercial Masks and Respirators and Cotton Mask Insert Materials using SARS-CoV-2 Virion-Sized Particulates: Comparison of Ideal Aerosol Filtration Efficiency versus Fitted Filtration Efficiency. *Nano Lett* 20(10): 7642-7647.
48. Clase CM, Fu EL, Ashur A, Beale RCL, Clase IA, et al. (2020) Forgotten Technology in the COVID-19 Pandemic: Filtration Properties of Cloth and Cloth Masks-A Narrative Review. *Mayo Clin Proc* 95(10): 2204-2224.
49. Zhang CQ, Chung PK, Liu JD, Chan DKC, Hagger MS, et al. (2019) Health Beliefs of Wearing Facemasks for Influenza A/H1N1 Prevention: A Qualitative Investigation of Hong Kong Older Adults. *Asia Pac J Public Health* 31(3): 246-256.
50. Ma QX, Shan H, Zhang HL, Li GM, Yang RM, et al. (2020) Potential utilities of mask-wearing and instant hand hygiene for fighting SARS-CoV-2 external icon. *J Med Virol* 92(9): 1567-1571.

