

The War on Covid-19 Pandemic ARDS Should and Must End the Lockdown Triumphantly Soon: Only Utter Stupidity May Prevent or Prolong that

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Introduction

In, February 16th issue of Nature [1] the following feature and opinion was reported.

Features and opinion of Nature on February 16th

Coronavirus is here to stay [1]

In January, Nature asked more than 100 immunologists, infectious-disease researchers and virologists working on SARS-CoV-2 whether it could be eradicated. Almost 90% of respondents think that the coronavirus will become endemic - meaning that it will continue to circulate in pockets of the global population for years to come. But failure to eradicate the virus does not mean that death, illness and social isolation will continue on the scales seen so far. The future will depend heavily on the type of immunity people acquire and how the virus evolves.

Here in the current issue of ECEC the following is reported.

A different opinion: A minority report of one

Coronavirus will go away: An optimistic hopeful minority report, Covid-19 war will end before the start of May.

The opinion of Nature is based on a survey that was concluded in in January 2021. In this pessimistic depressive title of "Corona virus is here to stay" [1]. I disagree. I wish to express and report my opinion that Corona virus will go away where it shall remain dormant and harmless like all serious viral infections of the past that have been prevented by active vaccination. Furthermore, I wish to express my opinion that the lockdown state of many countries like the UK will end before the start of May. The solid scientific evidence to support this minority of one report is given here.

The only problem with validating this theory is that it depends on the collaboration of other scholars of researchers, scientists and doctors and their willingness to collaborate in an immediate study to validate the theory that will be proposed below. I am optimistic that at least two scholar researcher doctors will oblige and perform the validating study and are happy to act as witnesses and alibi to my theory as much as I hope all doctors will attempt to save the currently acutely ill patients on ICU with < 1 Litre of a concentrated salt solution of 5%NaCl and/or 8.4%NaCo₃.

Here I shall report the scientific basis for this hopeful, optimistic minority report that Coronal virus will go away before the start of May. I have a vested interest on deciding that the lockdown will end before the start of May triumphantly winning the war of Covid-19 ARDS pandemic on humanity before that date. I want to celebrate my 71st-birthday with my family outside our house in the UK after the lockdown ends. This will be my first time ever to celebrate a birthday of mine. I hope the whole world will join and rejoice the celebration.

It is well established that Covid-19 kills its victims by causing the acute respiratory distress syndrome (ARDS). I have been engaged in a parallel and relevant remarkable solo war against ARDS of another cause for 40-years now that has been documented in > 100 articles and 5 of 8 recently published books [2-6]. I have demonstrated that ARDS is caused by volumetric overload shocks (VOS) induced by excessive fluid gain that complicates fluid therapy of shocks in hospitals because of an error that is not the treating physician's fault.

I have established that the wrong Staling's law dictates the faulty rules on fluid therapy that mislead physicians into giving too much fluid therapy during the resuscitation of shock of trauma, haemorrhage and sepsis, acutely ill patients, and prolonged major surgery. This results in inducing VOS that cause ARDS from which sepsis is as innocent as the Wolf in Josef' story.

I believe and have just realized that there is a link between this common type of ARDS seen in the usual clinical practice and that of Covid-19 prevailing nowadays [7]. The reader is most likely to have heard this theory for the first time here in the ECEC Journal [7,8] because all my >100 articles on the subject reported over the last 4 years do not turn up on searching PubMed! This is because PubMed does not list articles reported in *Open Access Journals* (OAJ) [8]. All my articles, however, do appear on Google Scholars' search with citations. There is probably a stupid money cause for PubMed not referencing OAJ articles that qualifies for stupidity [9]. Let us hope it is temporary curable stupidity by repenting and rectifying the error by listing OAJ that survived > 2 years and referencing my articles reported over the last 4 years, not the permanent utter stupidity that is a problem without solution and malady without a cure [9].

Most of my articles were submitted to the top-rated journals first but were rejected without sending to peer-reviewers. Thus, the Editors-in-Chief of these top-rated journals of the World must be held responsible and accountable for rejecting these landmark impactful articles of mine that represent 14 new scientific discoveries in physics, physiology, and medicine [3]. They have the right to defend themselves using whatever excuses and proofs on their stand they might have.

The war on Covid-19 pandemic of ARDS has been going on for over a year now. It kills hundreds of thousands of patients every day all over the world and has caused great loss in humans' lives and billions of dollars. I have reasons to believe that this war shall and must end triumphantly soon [7,8]. This is due to a combination of the eradication of the vicious Covid-19 virus by active immunization that will take time to work hence it is good for future prevention, and a therapeutic curative therapy for the currently critically ill patients dying with ARDS caused by Covid-19 seen every day now.

Thus, VOS 2 is an almost impossible to recognize that complicates fluid therapy of other known type of shocks, cause ARDS, and occur seamlessly and unnoticed without a clear serological marker such as hyponatraemia of VOS 1. Validation of the volume of retained fluids in a patient can be done in two ways: The volumetric method in litres and the gravimetric method in Kg, and both should be recorded every day during hospital stay, done and compared at hospital admission and at the onset of ARDS as well as the time of hospital discharge or death. The maximum volume of HST used in a single patient is one litre- if it does not work consider the treatment as failure. This may occur in patients with permanent AKI who should go on haemodialysis setting the machine to negative fluid balance to get rid of the retained volume of fluid in the patient's body- they may recover their renal function.

Availability and choice of HST for the trial is summarized here. The concentrated salt solutions of 5%NaCl and/or 8.4%NaCO₃ are available in every hospital now or should be made adequately available before the start of the suggested trial. Sodium bicarbonate is already available in every resuscitation trolley in 200 ml bags of 8.4%NaCO₃ that is known to be used during the resuscitation of shock.

The 5%NaCl can be made available by any hospital pharmacist in bags of 500 ml or 1000 ml on the doctors’ request or readily provided by intravenous fluid manufacturers.

Why use these two fluids concentrations in particular? Because they have been tested and validated previously by me to be absolutely 100% safe without any complications. The HST of 5%NaCl and/or %NaCO₃ does not cause thrombophlebitis like fluids of higher concentrations. Fluid of lower concentrations are less effective, and its use are a hit or miss experience. A combination of both fluids should be used in every patient treated with it to induce the maximum desired effect of inducing massive diuresis of 4 - 5 litres of urine by the end of the 1-hour treatment. It is observed that the immediate diuresis that should start during the 1-hour therapy of ARDS producing this massive diuresis SHOULD NOT BE REPLACED by further intravenous fluid therapy as it defeats the objective of therapy.

The diuresed volume of urine must get out of the patient’s body and not to be replaced for the immediate recovery of the patient from his coma, ARDS, acute kidney injury (AKI), and cardiovascular and haematological manifestations as well as other hepatic and gastro-intestinal manifestations of the multiple organ dysfunction syndrome (MODS) usually seen in such cases though one system may predominate (Table 1). If the patient is on dialysis, the machine should be set to negative fluid balance. This HST is a magical lifesaving therapy of ARDS or MODS induced by any cause or predisposed by any condition to remove any excess fluid volume retained in the patient’s body. It is 100% safe and most effective in saving the lives of the patients that brings patients back from the dead. Please, stay by the patient’s bed side and watch him recover from coma and asks for a drink. It is the best hour you spend in your career life. It is quite simply magical.

Cerebral	Cardiovascular	Respiratory	Renal	Hepatic & GIT
Numbness	Hypotension	Cyanosis.	Oliguria	Dysfunction:
Tingling	Bradycardia	FAM ⁴	Annuria ⁸	Bilirubin ↑
SBB ¹	Dysrhythmia	APO ⁵	Renal failure or	SGOT ↑
COC ²	CV Shock*	RA ⁶	AKI ⁹	Alkaline Phosph.
Convulsions	Cardiac Arrest	Arrest	Urea ↑	GIT symptoms.
Coma	Sudden Death	CPA ⁷	Creatinine ↑	DGR ¹⁰
PMBCI ³		Shock lung		Paralytic ileus
		ARDS ⁵		Nausea and Vomiting.

Table 1: Shows the manifestations of VOS 1 of the TURP syndrome for comparison with ARDS manifestations induced by VOS2.

Abbreviation

SBB¹: Sudden Bilateral Blindness; COC²: Clouding of Consciousness; MBCI³: Paralysis mimicking bizarre cerebral infarctions, but is recoverable on instant use of HST of 5%NaCl and/or NaCO₃, and so is coma and AKI; FAM⁴: Frothing Around the Mouth; APO⁵: Acute Pulmonary Oedema; RA⁶: Respiratory Arrest; CPA⁷: Cardiopulmonary Arrest; ARDS⁵: Manifests later, on ICU; AKI⁹: Acute Kidney Injury; DGR¹⁰: Delayed Gut Recovery; CV Shock*: Cardiovascular shock of VOS reported here as VOS 1 and VOS2; Annuria⁸: That is unresponsive to diuretics but responds to HST of 5%Ncl and/or 8.4%NaCO₃; AKI⁸: Acute Kidney Injury. Also occurs the excessive bleeding at the surgical site and leukocytosis occurred in the absence of sepsis and septic shock.

(P.S. Please be prepared by inserting a urinary catheter, if one is not already there, and get two buckets placed next to the patient’s bed. When the patient recovers and asks for a drink, both you and your patient may celebrate your success with a drink each on me- just let me know).

I have NOT invented HST myself. The HST was first introduced in 1946 by Danowski TS, Winkler AW, Elkington JR [11] for treating dilutional hyponatraemic (DH) shock induced experimentally in dogs by large intravenous administration of sodium-free fluids that

caused DH that characterizes volumetric overload shock type one (VOS 1) which cause the first type of ARDS. Harrison, R.H., Boren, J.S. and Robinson, J.R. in 1956 [12] were the first to use HST in treating DH of the TURP syndrome in urological practice and clinical practice.

Decades after that HST was considered contraindicated by the authority even in the therapy of DH until 1987 when Ghanem AN, Wojtulewski JA and Penny MD [10] rejuvenated it and reported its successful lifesaving use in the therapy of DH and the TURP syndrome as anecdotal evidence at Br Med Jour. Ghanem AN and Ward JP reported the first term using VOS in an MD thesis in 1988 and an article in 1990 [11]. In the later prospective cohort study of 100 patients of whom 10% developed the TURP syndrome, it was established that volumetric overload (VO) is the most highly significant cause for the TURP syndrome (p=0007) (Table 2 and figure 1). Also (Figure 2 and 3) were taken from another study of 23 patients case series who suffered the TURP syndrome demonstrating VO of 7 litres cause death by ARDS (Figure 3), while patients who were saved from certain death by HST validated its effective use of lifesaving value (Figure 2).

Parameter	Value	Std. Err	Std. Value	T Value	P
Intercept			0.773		
Fluid Gain (l)	0.847	0.228	1.044	3.721	0.0007
Osmolality	0.033	00.014	-0.375	2.42	0.0212
Na+ (C_B)	0.095	0.049	0.616	1.95	0.0597
Alb (C_B)	0.062	0.087	0.239	0.713	0.4809
Hb (C_B)	-0.282	0.246	-0.368	1.149	0.2587
Glycine (C_B)	-4.973E-5	5.975E-5	-0.242	0.832	0.4112

Table 2: Shows the multiple regression analysis of total per-operative fluid gain, drop in measured serum osmolality (OsmM), sodium, albumin, Hb and increase in serum glycine occurring immediately post-operatively in relation to signs of the TURP syndrome. Volumetric gain and hypoosmolality are the only significant factors.

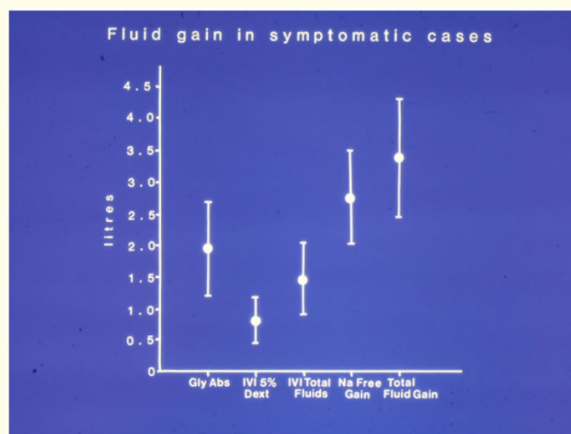


Figure 1: Shows the means and standard deviations of volumetric overload in 10 symptomatic patients presenting with shock and hyponatraemia among 100 consecutive patients during a prospective study on transurethral resection of the prostate. The fluids were of Glycine absorbed (Gly abs), intravenously infused 5% Dextrose (IVI Dext) Total IVI fluids, Total Sodium-free fluid gained (Na Free Gain) and total fluid gain in litres.

	A	B	C	D	E	F	G	H
1		Gr 1	Gr 2	Gr 3	Gr 3.1	Gr 3.2	Normal	Units
2	Number of patients	3	10	10	5	5	Mean	
3	Age	71	70	75	72	78	72	Year
4	Body weight (BW)	69	70	68	71	65	69	kg
5	Postoperative serum solute concentrations:-							Preoperative
6	Osmolality	271	234	276	282	271	292	mosm/l
7	Na+	110	108	120	119	121	139	mmol/l
8	Ca++	1.69	1.79	1.85	1.84	1.86	2.22	"
9	K+ (P<.05)	5.6	4.8	5.0	4.9	5.0	4.46	"
10	Co2 (P=.002)	23.0	23.0	25.5	24.0	26.4	27.30	"
11	Glucose	13.2	17.3	16.4	15.9	16.9	6.20	"
12	Urea (P=.0726)	26.5	9.0	6.6	6.8	6.4	6.7	"
13	Bilirubin (P<.05)	19	16	8	6	9	7	"
14	AST	124	32	20	18	21	20	"
15	Protein	43	52	48	44	52	62	g/l
16	Albumin	23	30	30	28	32	39	"
17	Hb (P=.0018)	119.3	127.9	114.5	105.2	123.8	138.8	"
18	WCC (P<.005)	18.9	16.2	7.5	7.8	7.2	8.0	per HPF
19	Glycine			10499			293	µmol/l
20	Therapy	CT	HST	Random.	HST	CT@		
21	Outcome	Death	Full Rec.		Full Rec.	Morb.@		

Figure 2: Shows the data of the 23-patients of the case series study [11]; the second clinical study on which this article is based. The significant changes of serum solute contents are shown in bold font with the corresponding p-value. Most of the patients showed manifestation of ARDS (Table 1) of which the cerebral manifestation predominated, being on initial presentation (Regional Anesthesia) and representation of VOS 1 (General Anesthesia). However, most patients were given large volume of saline that elevated serum sodium to near normal while clinical picture became worse. They suffered VOS2 that caused ARDS. The VO of patients to whom these data belongs are shown. Please note the elevation of urea and unurea of Group 1 who died indicated AKI. Elevations of Bilirubin and AST indicated hepatic dysfunctions. White cell count (WCC) elevation indicated inflammatory response of VOS 2 in ARDS or SIRS in the absence of sepsis.

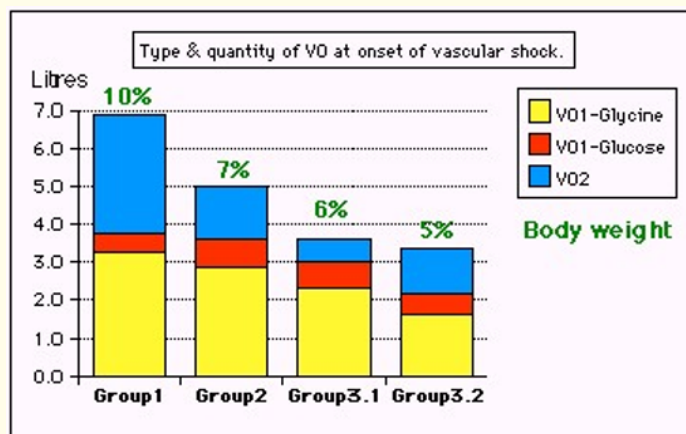


Figure 3: Shows volumetric overload (VO) quantity (in litres and as percent of body weight) and types of fluids. Group 1 was the 3 patients who died in the case series as they were misdiagnosed as one of the previously known shocks and treated with further volume expansion. Group 2 were 10 patients from the series who were correctly diagnosed as volumetric overload shock and treated with hypertonic sodium therapy (HST). Group 3 were 10 patients who were seen in the prospective study and subdivided into 2 groups; Group 3.1 of 5 patients treated with HST and Group 3.2 of 5 patients who were treated with guarded volume.

After that Ghanem has continued alone to identify VOS 2 induced by sodium-based fluids as the patho-aetiology of ARDS and validate HST in its successful lifesaving therapy [6]. Ghanem and Ward introduced the concept of volumetric overload in the patho-aetiology of TURP syndrome reported in a prospective randomized cohort study in 1990 [11], reported in the British Journal of Urology- now International. Ghanem also investigated the underlying faulty physiological law of Starling for the capillary interstitial fluid transfer proving it wrong on both forces that should be replaced by the hydrodynamic of the porous orifice (G) tube (Figure 4). Every word, sentence, statement, references and figures and tables mentioned here are reproduced from reference [6].

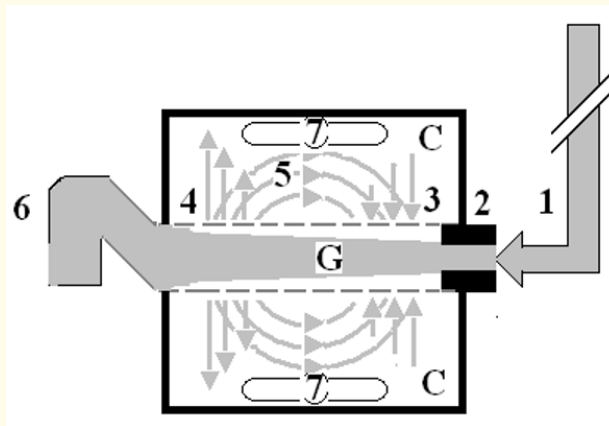


Figure 4: Shows a diagrammatic representation of the hydrodynamic of G tube based on G tubes and chamber C. This 37-years old diagrammatic representation of the hydrodynamic of G tube in chamber C is based on several photographs. The G tube is the plastic tube with narrow inlet and pores in its wall built on a scale to capillary ultra-structure of precapillary sphincter and wide inter cellular cleft pores, and the chamber C around it is another bigger plastic tube to form the G-C apparatus. The chamber C represents the ISF space. The diagram represents a capillary-ISF unit that should replace Starling's law in every future physiology, medical and surgical textbooks, and added to chapters on hydrodynamics in physics textbooks. The numbers should read as follows:

1. The inflow pressure pushes fluid through the orifice.
2. Creating fluid jet in the lumen of the G tube**.
3. The fluid jet creates negative side pressure gradient causing suction maximal over the proximal part of the G tube near the inlet that sucks fluid into lumen.
4. The side pressure gradient turns positive pushing fluid out of lumen over the distal part maximally near the outlet.
5. Thus, the fluid around G tube inside C moves in magnetic field-like circulation (5) taking an opposite direction to lumen flow of G tube.
6. The inflow pressure 1 and orifice 2 induce the negative side pressure creating the dynamic G-C circulation phenomenon that is rapid, autonomous, and efficient in moving fluid and particles out from the G tube lumen at 4, irrigating C at 5, then sucking it back again at 3,
7. Maintaining net negative energy pressure inside chamber C.

**Note the shape of the fluid jet inside the G tube (Cone shaped), having a diameter of the inlet on right hand side and the diameter of the exit at left hand side (G tube diameter). I lost the photo on which the fluid jet was drawn, using tea leaves of fine and coarse sizes that runs in the centre of G tube leaving the outer zone near the wall of G tube clear. This may explain the finding in real capillary of the protein-free (and erythrocyte-free) sub-endothelial zone in the Glycocalyx paradigm. It was also noted that fine tea leaves exit the distal pores in small amount maintaining a higher concentration in the circulatory system than that in the C chamber- akin to plasma proteins.

The final affirmative proof Starling's law wrong and g tube hydrodynamic is the correct replacement: New results and critical analytical criticisms of impactful landmark articles, has been accepted and is in the press now [14]. This is the latest of my impactful landmark articles that was also rejected by multiple top-rated journals of the World, but why!? I still do not know now. If anyone does, please tell me or give me the name of the authority that I should complain to against at least one journal who has rejected 21 articles over the last 4 years, and one that was submitted back in November 1988 before their EM began most were on the patho-aetiology and therapy of ARDS.

Treatment of ARDS using concentrated salt solution of 5%NaCl and/or 8.4%NaCo₃ is professionally researched and established by me to save the lives of ARDS patients induced by sodium-free fluid that cause the transurethral resection syndrome (TURP) syndrome known in urology to present with acute dilutional hyponatraemia. This causes VOS which is a shock that complicates other types of shocks hence commonly mistaken for one of the recognized shocks and gets wrongly treated by further volume expansion using crystalloids, colloids and/or blood fluids. Thus, VOS occur seamlessly and unnoticed particularly VOS type 2 of sodium-based fluid. Thus VOS 2 is an almost impossible to recognized that complicates fluid therapy during the management of other known type of shocks, cause ARDS, and occur seamlessly, unnoticed without a clear serological marker such as dilutional hyponatraemia of VOS 1. Validation of the volume of retained fluids in a patient can be done in two ways: The volumetric method in litres and the gravimetric method in Kg, done and compared at hospital admission and at the time of onset of ARDS, and finally on the day of death or discharge.

The HST is not my invention as I only rejuvenated and validated it in clinical practice after reporting it as anecdotal evidence in 1985 [10] for the therapy of the TURP syndrome, acute dilutional hyponatraemia and ARDS that complicates them and cause death when initial volumetric overload is of type one of the sodium-free fluids (VOS1) manifest. This is transferred by fluid therapy using sodium-based fluids of crystalloids and or colloids and blood into VOS2 which causes ARDS. The therapy was first used experimentally in dogs [11] and in clinical urological practice by Harrison III, *et al.* [12] for the successful therapy of the TURP syndrome and acute dilutional hyponatraemia.

Drug companies are working hard with enormous amount of money to develop a safe and effective vaccine for Covid-19- this is for future prevention. I have been working equally hard from my home in Egypt in complete quarantine of isolation and confinement since Covid-19 started its war against humanity a year or so ago. I shall continue to do so at home in the UK until the war is over. I work 20 hours per day and sleep only 4 interrupted hours a day. During the long sleepless nights and days, I do not feel a moment of boredom or dullness at all and there is nothing that I need that does not come to me with the help of family members, my wife Nannah Abdullatif and daughter Sarah, and a dear friend of mine Mr. Ahmed Awed.

I do not miss seeing the streets or shops but miss seeing my friends once a week every Friday. This period of isolation and confinement quarantine at home has been spent most productively and usefully in authoring > 100 articles and 8 books. In the passenger allocation form that all passengers entering the UK must fill 48 hours before landing by law, it asks whether I wish to shorten the 10-days quarantine period of my isolation confinement at home. There was not a question whether I wish to voluntarily extend it for as long as the pandemic lasts. I would have answered yes because I am on a voluntary mission to end this pandemic war against Covid-19 triumphantly within < 2 months if other scholars researchers co-operated and collaborated with me and conducted the required study [7,8] that I cannot do it myself being retired without having access to work and research facilities.

I work without any external financial help at all to help in the research that validate both the aetiology of ARDS and the effective therapy of concentrated salt solution of 5%NaCl and/or 8.4%NaCo₃ in treating VOS that causes ARDS. I have fallen in debt to my bank for the first ever time in my life to finance my research and pay APC in OAJ because I believe it worthwhile investment and a good value for my money. All my articles except some of the latest few were accepted and reported without paying any APC. This is only to avoid a possible accusation that my work was reported because I paid for it. I realized that DOI charges must be paid by the journals, hence I started to

pay this journal only \$30 per accepted article, and another I pay \$100 per accepted article. These latest articles are important landmark articles that got rejected by the top-rated journals of the world for some reason that beats me to understand till today- they refuse to say the real reason and only send me their utterly stupid standard letter of rejection. I do not know of any authority that I can complain about this. I would appreciate it if anybody can tell me the reason that I can understand.

This HST is a definitive lifesaving therapy for patients who have developed ARDS and usually die in hundreds of thousands all over the world, so it should work on that caused by Covid-19 and sepsis [6] as well as the acutely ill patients and patients undergoing prolonged major surgery who suffer from ARDS and present during their hospital stay.

I know that the challenge and the stake or risk is extremely high, and I am taking a huge gamble, but it is only my reputation being at a vulnerable stake here, and it is only my money that is being invested. HST will not cost anybody but me any money and will not put your patients at any risk and will not cause any side effects- it is 100% guaranteed. To make it easy for every doctor managing ARDS cases of Covid-19 particularly Intensivists and anaesthetists running ICU I shall go absolutely daring to say try a pilot study on 5 patients and report your conclusion FAST. It is perfectly acceptable to me for validating my theory so it should be accepted by the journal of your choice as valid evidence in support of the theory and on my responsibility.

During a war emergency law apply and overrules the usual rules and regulations, and even may put some laws on hold. I shall accept your verdict and you will be my witness and alibi. We are at war against Covid-19 and its ARDS. This is an opportunity for instant positive success for you that would delight me and the rest of the World.

This is my fascinating true story of 40-years ongoing research that has many starts: the one of relevance hear is the writing of my first essay to the Lancet after obtaining my MD Thesis in Nov. 1988. This amazing success story has not ended yet and I may write it up some day either in Arabic or English if I find the time. Alternatively, I may leave it to a professional story writer that may interest film makers later. Of all the movies I have seen in cinemas and on TV Amadeus remains my best favorite film so far.

The rewards of my endeavor might be equal or greater than the gamble on the theory of using HST for treating ARDS of Covid-19. It is a calculated risk. I trust my observations, scientific acuity, and the results and conclusions of my 40-years professional research that would not let me down now. Please trust me and have faith in me as I can do what I say I can. Egypt no longer needs my help as there is no lockdown there now except some limit on the opening times of shops and cafes and people are enjoying perfectly normal life despite high rate of Covid-19 mortality. Furthermore, to Egypt and perhaps the whole Arabic World I am like petrol available under their feet, but it only has value when discovered by the West professional expertise. The UK and USA do need my help and would appreciate it to end their current state of lockdown and to save the lives of their patients. This explains why I am here in the UK now. The whole world shall appreciate my help to reduce or prevent mortality of ARDS due to Covid-19 as well as sepsis and other predisposing factors. This is how I put my money where my mouth is. The race is on. Prove me wrong if you dare! Just kidding I should say please if you care.

Addendum

The author is available to all interested researchers 24/7 (++44) (0) 7306321589) to answer any questions or provide any clarification on the suggested trial and HST. If you do not get an answer to your call this is because I am on one of my interrupted irregular sleep break of 1-h every 3 - 5 hours. Please call again after one hour or send me an email on: anmghanem1@gmail.com Communication may be in English or Arabic, if you cannot speak and write in these languages please use your own that will be automatically translated for me by Google.

Conflict of Interest

None.

Funds Received

None.

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