

Bird flu

Pandemic flu preparation: an unheeded lesson from SARS

EDITOR—Current global battle plans against pandemic flu discussed by Pickles seem to ignore one clear lesson of the severe acute respiratory syndrome (SARS): that international air travel is the one feature that most differentiates current transmission scenarios from those in 1918.¹ The new coronavirus arrived in Hong Kong from China on a jet plane and, from that efficient air hub, quickly spread to Vietnam, Singapore, and Canada, eventually engulfing 27 countries around the globe.

One thing is certain: if and when sustained human to human transmission of H5N1 becomes reality, the world will no longer be dealing with sporadic avian flu, borne along migratory flight paths of birds,² but aviation flu—winged at subsonic speed along commercial air conduits to every corner of planet Earth.

I hope that appropriate preventive measures are being put into place by the airlines and airports of the world, but that may be just the problem. What is the evidential base for effective interventions, and how rigorously have the aviation policy options been evaluated? Three years after the SARS episode, we still do not understand the dynamics of microbial transmission in aircraft cabins, toilets, and airport transit lounges; neither are we clearer regarding the complex spatial interactions of travellers converging on busy air terminals, nor how best such human traffic may be channelled to minimise the risk of viral transmission.

Against an estimated \$800bn (£460bn; €650bn) a year that a human pandemic of avian influenza could cost the global economy,³ not to mention the incalculable cost in terms of human lives, it seems incredible that the SARS scare did not spur serious scientific activity to strengthen public health on the air transportation front. Should not the technology for picking out passengers capable of transmitting deadly pathogens and setting off epidemics be pursued as energetically as the technology for stopping terrorists from boarding a plane?



Meng-Kin Lim *associate professor*
Yong Loo Lin School of Medicine, National
University of Singapore, Singapore 117597
coflimk@nus.edu.sg

Competing interests: None declared.

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Pandemic flu is not just about probability

EDITOR—In response to Bonneux and Van Damme and their article on an iatrogenic pandemic of panic,¹ it is worth pointing out that the key difference between a flu pandemic (or similar emerging infections such as the severe acute respiratory syndrome, SARS) and other diseases is not the cumulative burden of disease but that the pandemics, etc, have the capacity to bring the economy to a complete standstill and cause societal disruption on a massive scale.

A few anthrax letter bombs in 2001 brought the entire US postal service to a stop, an event that illustrates the potential of only a few cases to have a catastrophic economic impact.² SARS resulted in severe economic disruption in affected areas, with near bankruptcy of some industries such as travel.^{3,4} This is why politicians will continue to invest in disaster management planning around potential pandemics, even if the probability of such a pandemic occurring is relatively low. And so they should.

C Raina MacIntyre *principal research fellow*
National Centre for Immunisation Research and Surveillance of Vaccine Preventable Diseases And University of Sydney, Children's Hospital at Westmead, Westmead, NSW, 2145 Australia
RainaM@chw.edu.au

Competing interests: None declared.

- 1 Bonneux L, Van Damme W. An iatrogenic pandemic of panic. *BMJ* 2006;332:786-8. (1 April.)
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Pandemic flu at the coal face

EDITOR—Bonneux and Van Damme's advice to ensure that there is adequate bed capacity in the acute sector will be met with hollow laughter by many of us working at the coal face of the NHS.¹ Our undersized, PFI funded district general hospital already struggles to cope with emergency admissions in quieter periods, despite regularly cancelling elective surgical admissions. It seems clear that we will have to get on with it in the community, where therapeutic options are limited. Oseltamivir shortens the duration of the illness by one day on average, and any vaccine will not be ready in time. It was therefore refreshing to read that some of the traditional core values of medicine still have a part to play.

Against this background, the pundits are encouraging each practice to draw up plans to deal with the projected health chaos and ensure "business continuity." At a time of soaring demand, with a reduced and enfeebled workforce, I cannot see where the extra capacity will come from. Our only hope will be to rediscover the sense of vocation and teamwork that has been squeezed out by the culture of audit and accountability, and all pull together. We may even be able to enlist the help of recently retired doctors—assuming that is, that they are on the primary care trust's primary medical performers' list, have had a recent appraisal, and are in possession of a valid personal development plan approved by the clinical governance lead.

Jonathan D Sleath *general practitioner*
The Surgery, Kingstone, Hereford HR2 9HN
jonathan.sleath@nhs.net

Competing interests: None declared.

- 1 Bonneux L, Van Damme W. An iatrogenic pandemic of panic. *BMJ* 2006;332:786-8. (1 April.)

Non-European doctors and change in UK policy

Ten thousand international medical graduates may be affected

EDITOR—O'Dowd quotes 1000 international medical graduates as the number likely to be affected by the Department of Health's ruling to end permit-free training.¹ Ten thousand may be nearer the mark, as most of the 12 707 international medical gradu-

ates who passed part 2 of the Professional and Linguistic Assessments Board (PLAB) examination between 2004 and 2005 will be affected by the ruling (personal communication, Registration and Education Directorate, General Medical Council, 2006).

Whether one, or 10 000, the principle is the same. When applying for junior posts, nationality is now to be promoted over merit. The humanitarian and racial implications are the first consideration, but service provision will also be affected as will training and research relationships with countries outside the European Economic Area (EEA).

Unless modified, the ruling will lead to hundreds, perhaps thousands, of highly skilled doctors leaving the United Kingdom in July. The short term gains for UK graduates will be bought at the expense of ill feeling, vacant posts, and a breakdown of carefully nurtured training relationships, which have brought such benefit to medicine in the UK over the past 50 years.

We urge that at the very least the ruling be downgraded to apply only to new graduates taking PLAB and not applied retrospectively to those already in training.

It is also critical that those taking PLAB are warned from today in the strongest possible terms of the ruling. The number of PLAB places needs to be cut drastically if we are to rescue anything from the current debacle, which reflects so badly on the NHS's reputation as an equal opportunities employer and is causing such distress to international medical graduates and all who work with them.

Competing interests: All authors work with international medical graduates. PT is chair of the Royal College of Physicians' working group on international medical graduates.

Peter Trewby *consultant physician*
Peter.trewby@cddah.nhs.uk

Gareth Williams *consultant physician*

Peter Williamson *consultant physician*

Edward Barnes *consultant physician*

Peter Carr *consultant physician*

Jennifer Crilley *consultant physician*

Alwyn Foden *consultant physician*

Stephen Mitchell *consultant physician*

Jeremy Murphy *consultant physician*

Darlington Memorial Hospital, Darlington DL3 6HX

1 O'Dowd AO. Non-European doctors feel penalised by change in UK policy. *BMJ* 2006;332:744. (1 April.)

What about highly skilled migrant doctors?

EDITOR—The news article by O'Dowd tries to highlight a serious problem faced by overseas doctors who entered the United Kingdom in recent years, but it falls short of supporting their cause.¹ The NHS trusts are showing their true colours. Why are they overenthusiastically rejecting applications from overseas doctors even if they do not need a work permit? Trusts should remember that at times of crisis, when the NHS was finding it difficult to run a smooth service, they were begging for overseas graduates to come to the UK. The Home Office had also introduced schemes such as the highly skilled migration programme, which allows a doctor to work without a work permit.

But the health department and NHS suddenly realised that they have enough doctors in the UK and hence overseas doctors would need a work permit. But why should some trusts reject applications from highly skilled migrants if they are suitably qualified, worked in the NHS for a few years, and do not need a work permit? This is a misinterpretation of the rules by personnel managers with a prejudice against people from overseas. We are law abiding, tax paying residents who are making an important contribution to British society. As a highly skilled migrant doctor, I would like clarification from the BMA and Department of Health on this matter. I hope the BMA and Commission for Racial Equality notice this and take decisive action. These organisations should also remind NHS trusts that the question of visa status should be raised only before the job offer and not before shortlisting.

Krishnamoorthy Narayan *senior house officer*
Aberdeen Royal Infirmary, Aberdeen AB25 2ZN
n.krishnamoorthy@nhs.net

Competing interests: KN is a doctor on the highly skilled migration programme.

1 O'Dowd AO. Non-European doctors feel penalised by change in UK policy. *BMJ* 2006;332:744. (1 April.)

Change is cruel and opportunistic

EDITOR—The decision by the Department of Health that all doctors from outside the European Union who wish to work in the United Kingdom will need a work permit smacks of opportunism.¹ For several years the job situation for overseas graduates has been appalling—in 2001, for my first job, I sent 150 applications. The advertised “shortage” of doctors—a shortage of consultants—has encouraged thousands of international graduates to take the Professional and Linguistic Assessments Board (PLAB) test. They arrive here, and it is only when they start looking for work that reality sets in. There have been calls for the General Medical Council to put a stop to the test until existing unemployed doctors are absorbed into the system and the inward flow stops—calls that the GMC has steadfastly ignored, as the test is obviously profitable.

I agree that no more overseas graduates should be allowed into the United Kingdom. However, the ones who are already here should be given a chance, and six months is too short. Of course, many UK trained graduates are out of work, but this is the result of bad workforce planning and not the fault of overseas doctors. What else do you expect when you open more places in medical schools at an alarming rate and introduce Modernising Medical Careers at the same time?

The recent legislation is symptomatic of the callous—institutionally prejudiced—nature of the establishment. If, in the future, the tables turn—and things are always changing in the NHS—and there is once again a need for overseas doctors, I doubt there will an enthusiastic response.

Overseas doctors have contributed to the NHS for years, and this is no way to

treat them. I am disappointed the BMA is not campaigning against the ruling more vociferously.

M A I Khan *specialist registrar*
Royal Preston Hospital, Preston PR2 9HT
asadik76@hotmail.com

Competing interests: MAIK is an overseas trained doctor.

1 O'Dowd AO. Non-European doctors feel penalised by change in UK policy. *BMJ* 2006;332:744. (1 April.)

NHS financial crisis: signs of crisis or hope?

EDITOR—The current financial crisis in the NHS may be the birth pangs of real reform and not a cause for panic.¹

Historically NHS trust accounts have contained little useful information. They existed more to tick a statutory reporting box than to provide useful guidance on performance or the state of the hospital. To declare surpluses (which will be taken away) has never been good, and deficits smack of poor control. So trusts, primary care trusts, and strategic health authorities expended great efforts to achieve the political goal of “balance” and none to reporting something relevant to management decision making.

In the private sector, company accounts have a role (supplemented by private management information for managers only) in informing managers, investors, and governments about the real state of the business. Regulation and audit prevent serious manipulation by unscrupulous managers.

The current deficits may be a welcome sign that NHS accounts are starting to move from being a political pretence that all resources are used equally well to an honest admission that some hospitals are better managed than others. For example, the reference cost exercise behind tariff setting shows that the most efficient hospitals can be half the cost of the worst for the same procedures.² In the private sector, poor performers would be quickly fixed or closed. The fact that badly managed and expensive hospitals are cutting staff is a sign that the right management actions are being taken at last.

Well organised hospitals deliver both higher quality care and more efficient use of government money than their badly managed rivals. If we maintain the right incentives and don't succumb to panic, the prize could be a rapidly improving NHS where quality and speed of care just keep getting better.

Stephen Black *management consultant*
London SW1 W9SR
stephen.black@paconsulting.com

Competing interests: SB is a management consultant in health.

1 Day M. NHS faces job cuts as financial crisis deepens. *BMJ* 2006;332:743. (1 April.)

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Risks and benefits of omega 3 fats



Health benefits of omega 3 fats are in doubt

EDITOR—In their systematic review of observational studies and randomised controlled trials Hooper et al conclude that omega 3 fats do not have a clear effect on overall mortality, combined cardiovascular events, or cancer.¹

We do not agree with their approach of pooling α linolenic acid (which is of vegetable origin) with omega 3 fatty acids from fish. Furthermore, fatal and non-fatal cardiovascular events, as well as different types of (patient) populations, were pooled in this meta-analysis. On the basis of previous reviews in this field, each of these combinations could blur a clear view on the health effects of omega 3 fats. Several meta-analyses have shown a favourable effect of fish intake and intake of fish fatty acids on stroke and fatal coronary heart disease.²⁻⁴ For α linolenic acid, the epidemiological evidence is less convincing, and randomised controlled trials are lacking.

Data from many epidemiological studies and the GISSI-Prevenzione trial show that omega 3 fats from fish protect against heart disease. Although the trial by Burr et al (DART-2)⁵ in patients with angina should not be ignored, it is hard to interpret these adverse findings in light of previous studies. A different conclusion would be derived from the review by Hooper et al if these data were omitted, favouring a cardioprotective effect of omega 3 fats from fish. The pooled relative risk of 0.83 (95% confidence interval, 0.75 to 0.91) that would then be obtained is in line with the meta-analysis of Bucher et al.¹

Most epidemiological studies and randomised controlled trials indicate a protective effect of omega 3 fatty acids from fish against fatal cardiovascular events. The advice for healthy people and myocardial infarction patients to consume oily fish regularly does not confer adverse risks to health and is fully justified on the basis of current scientific evidence.

Johanna M Geleijnse *assistant professor*
marianne.geleijnse@wur.nl
Ingeborg A Brouwer *associate professor*
Edith J M Feskens *associate professor*
Division of Human Nutrition, Wageningen
University, 6700 HD Wageningen, Netherlands

Competing interests: None declared.

1 Hooper L, Thompson RL, Harrison RA, Summerbell CD, Ness AR, Moore HL, et al. Risks and benefits of omega 3 for mortality, cardiovascular disease, and cancer: systematic review. *BMJ* 2006;332:752-60. (1 April).

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A few thoughts on systematic review

EDITOR—Hooper et al's conclusions that omega 3 fats have no effect on total mortality, combined cardiovascular events, or cancer are somewhat misleading.¹

Firstly, their null findings could be partly explained by the use of the composite end points. They ignore strong biological evidence for the potentially disease specific effects of omega 3 fat. The underlying hypotheses for this study are not clearly stated for the main analyses. Systematic reviews have been published of the effect on mortality from coronary heart disease of long chain omega 3 polyunsaturated fatty acids in randomised controlled trials and fish in prospective cohort studies.^{2,3}

Secondly, the authors focus primarily on the summary estimates from heterogeneous studies.

Thirdly, Hooper et al exclude 108 potential cohorts that have no omega 3 assessment. Dietary intake of long chain omega 3 fatty acids assessed by dietary instruments is more likely to be a surrogate marker of fish consumption. The effects of dietary long chain omega 3 fatty acid intake cannot be isolated from fish intake. In observational studies, the focus should therefore be on fish consumption rather than intake of long chain omega 3 fatty acid. Hooper et al also compare the most exposed quantile with the least exposed quantile. Since the amounts of omega 3 intake substantially varied between these two extreme groups across individual studies, the combined results may differ depending on the range of omega 3 intake and number of exposure groups in the primary studies.

Fourthly, the authors do not provide data for exploring any dose-response relation or possible threshold for the effects of omega 3 fats on different end points of interest. Neither do they provide further evidence to justify the sufficiency and robustness of their results.

Finally, their study does not distinguish between primary prevention and secondary prevention by omega 3 fatty acids. Mixing them together could lead to misinterpretation of the results.

Ka He *assistant professor*
Department of Preventive Medicine, Feinberg
School of Medicine, Northwestern University,
680 North Lake Shore Drive, Suite 1102, Chicago,
IL 60611, USA
kahe@northwestern.edu

Yiqing Song *instructor*
Division of Preventive Medicine, Brigham and
Women's Hospital, 900 Commonwealth Avenue
East, Boston, MA 02215, USA

Competing interests: None declared.

1 Hooper L, Thompson RL, Harrison RA, Summerbell CD, Ness AR, Moore HL, et al. Risks and benefits of omega 3 for mortality, cardiovascular disease, and cancer: systematic review. *BMJ* 2006;332:752-60. (1 April).

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3 He K, Song Y, Davighus ML, Liu K, Van Horn L, Dyer AR, et al. Accumulated evidence on fish consumption and coronary heart disease mortality: a meta-analysis of cohort studies. *Circulation* 2004;109:2705-11.

Summary of responses

EDITOR—The systematic review by Hooper et al with accompanying editorial by Brunner resulted in 30-odd electronic responses, most of which raised similar concerns.^{1,2} The main issue was the selection of studies—an “indiscriminate” mix of primary and secondary prevention studies.

The main objection was to the inclusion of the “methodologically poor” DART-2 study,³ which alone changed the conclusion of the meta-analysis from “clear benefit” to “no benefit.” Among the numerous weaknesses that the DART-2 authors themselves had originally drawn attention to, were that this study was not blinded and used capsules containing EPA (eicosapentaenoic acid) rich oil derived from fish, but not fish oil.

DART-2 aside, correspondents agreed that pooling heterogeneous studies led to comparisons that were not “like with like.” Dietary advice was compared with fish oil intake, supplements with fish intake; there were differences in blinding; fish oil supplements had different strengths; studies measuring blood concentrations were excluded and only those measuring level of intake included; intake of α linolenic acid (of vegetable origin) was compared with intake of omega 3 fatty acids from fish; different patient populations and fatal and non-fatal cardiovascular events were pooled, and so on. The selection of observational studies was criticised, and “considering omega 3 without considering excess omega 6 in the diet is akin to reviewing healthy diet without factoring in effects of smoking.” This sentiment was expressed by several correspondents, who thought it was a limitation of the study.

Among the criticisms levelled at all studies was that participants' intake of potassium and sodium were not taken into consideration. Fish is an important dietary source of potassium, whereas fish oil contains none. A recognised cause of cardiovascular disease is high dietary sodium intake coupled with low dietary potassium intake, and, a correspondent argues, all the trials carried out to date on fish oil supplements are invalidated by the fact that dietary sodium and potassium intake was not controlled. The specific role that EPA has in reducing the risk of heart disease by lowering blood viscosity was not mentioned, and neither were the anti-inflammatory properties, which are valuable in autoimmune and inflammatory diseases. The genetic background of participants should also have been analysed for diet-gene interactions.

A group from Australia writes that the potential harms associated with omega 3

fatty acids need to be balanced against the hazards of the treatments they displace, such as non-steroidal anti-inflammatory drugs (NSAIDs). In their example of rheumatoid arthritis NSAIDs can be associated with serious upper gastrointestinal haemorrhage or myocardial infarction combined in 2% of patients a year, clearly outweighing any likely hazards associated with fish oil use.

Birte Twisselmann *assistant editor (web)*

Competing interests: None declared.

- 1 Electronic responses. Risks and benefits of omega 3 fats for mortality, cardiovascular disease, and cancer. <http://bmj.bmjournals.com/cgi/eletters/332/7544/752> (accessed 6 Apr 2006).
- 2 Electronic responses. Oily fish and omega 3 fat supplements. <http://bmj.bmjournals.com/cgi/eletters/332/7544/739> (accessed 6 Apr 2006).
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Benefits from detecting dementia are dubious

EDITOR—The diagnosis of dementia remains an unattractive achievement in primary care when the benefits are so unclear.^{1 2} The authors of the paper and the accompanying editorial say that patients are being denied optimal drugs and psychosocial interventions. The case for prescribing antidementia drugs is hardly overwhelming: they are relatively ineffective and expensive. Neither does a diagnosis of dementia open the door to a series of available social services, as the social needs are so dependent on other physical illnesses whose course is unpredictable.

No mention is made of any drawbacks of dementia diagnosis—how many forgetful elderly people want to be labelled as “demented”? I need to see more evidence of benefit before I start looking hard for this diagnosis.

Laurie R Davis *general practitioner*
South Hermitage Surgery, South Hermitage,
Shrewsbury SY3 7JS
lauriedavis@doctors.org.uk

Competing interests: None declared.

- 1 Downs M, Turner S, Bryans M, Wilcock J, Keady J, Levin E, et al. Effectiveness of educational interventions in improving detection and management of dementia in primary care: cluster randomised controlled study. *BMJ* 2006;332:692-6. (25 March.)
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Something old, something new in wound dressings

EDITOR—Around 20 years ago EUSOL (Edinburgh University solution of lime), a cheap and effective antiseptic solution used widely to moisten gauze dressings by people involved in day to day wound care, was removed on the advice of those involved in largely in vitro studies. Since then, marketed wound care products have become hugely more expensive, but in my view no more effective, and often, in the case of occlusive dressings, an excuse to neglect the ideal of regular care for most wounds.

What a shame that the ABC of wound care,¹ in listing currently available dressings, starts by debunking one of the simplest dressings, gauze. If gauze does any harm to epithelialisation, as suggested, it is simply because it is not remoisturised by the people who remove it.

The biggest influence on the successful outcome of chronic wounds is the meticulous daily attention of staff skilled at cleansing and debriding. Sadly, today's wound care nurses, although usually highly knowledgeable in prescribing expensive “leave in place” dressings of the type listed in the ABC article, are often unable properly to debride a necrotic ulcer at the bedside. This sorry clinical situation will not improve until recommendations for dressing materials come from working surgeons as much as from doctors and rehabilitation experts.

Peter J Mahaffey *consultant plastic and reconstructive surgeon*
Bedford MK42 9DJ
mahaffey@lycos.co.uk

Competing interests: None declared.

- 1 Jones V, Grey JE, Harding KG. ABC of wound healing. Wound dressings. *BMJ* 2006;332:777-80. (1 April.)

Entrenched misinformation about X and Y sperm

EDITOR—The widely held idea that spermatozoa bearing the Y chromosome (Y sperm) swim faster than those bearing the X chromosome (X sperm) seems to have originated from Shettles's work in 1960, using phase-contrast microscopy.¹ He claimed to have observed “two distinct populations” of spermatozoa.¹ After attempting to count the chromosomes, he concluded that the smaller heads contain the Y and the larger the X chromosome. There were no intermediate types.¹ The following year he reiterated these findings, adding that smaller headed spermatozoa can migrate more rapidly and fertilise the egg more often in the distal part of the tube.²

Reading Shettles's reports in *Nature* and other peer reviewed journals, many researchers thereafter believed that Y sperm swim faster than X sperm. The finding particularly influenced research on sperm separation.

Although several attempts have been made to correct this impression, it was not until the development of computer assisted sperm analysis (CASA)³ that reliable observations could be made. So far, researchers have found no morphological differences between human X sperm and Y sperm.⁴ Neither mature sperm nor their precursors possess significant morphological differences between X and Y genotypes⁴; and Y bull sperm do not swim faster than X sperm.⁵

Valerie J Grant *senior lecturer*
University of Auckland, Private Bag 92019,
Auckland 1, New Zealand
vj.grant@auckland.ac.nz

Competing interests: None declared.

- 1 Shettles LB. Nuclear morphology of human spermatozoa. *Nature* 1960;186:648-9.
- 2 Shettles LB. After office hours: conception and birth sex ratios: a review. *Obstet Gynecol* 1961;18:122-30.
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New disease: motivational deficiency disorder



ALEX & ILLAUSTONE & GETTY

Study ignores economic benefits

EDITOR—As a sufferer of motivational deficiency disorder (MoDeD) I felt compelled to respond to the news item by Moynihan.¹ Then I decided, why bother? But I finally roused myself to take issue with the estimates of the economic costs of the disorder. This ignores the fact that MoDeD sufferers are responsible for an estimated 35% of consumption of snack foods, 40% of viewing of all reality TV shows, and 45% of all purchases of popular music. In addition, MoDeD sufferers produce 35% fewer greenhouse gases because of their tendencies to stay at home. A more comprehensive analysis of the full economic impact of MoDeD should be done, preferably by someone other than me.

David Atkins *health services researcher*
Agency for Healthcare Research and Quality,
Rockville, MD 20850, USA
david.atkins@comcast.net

Competing interests: None declared.

- 1 Moynihan R. Scientists find new disease: motivational deficiency disorder. *BMJ* 2006;332:745. (1 April.)

Too much effort

EDITOR—We actually identified motivational deficiency disorder (MoDeD) several years ago,¹ but couldn't be bothered to follow it up.

John L Cliff *behavioural engineer*
Behavioural Engineering, Richmond TW9 2LL
johncliff@bulldoghome.com

Competing interests: None declared.

- 1 Moynihan R. Scientists find new disease: motivational deficiency disorder. *BMJ* 2006;332:745. (1 April.)

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