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Editorial

# Kraepelin–Fraud Syndrome

SUMMARY

Emil Kraepelin (1856–1926) and Sigmund Freud (1856–1936) here (via mysterious mediumistic mechanisms) describe a syndrome, which probably emerged in the 1950s, and can now readily be observed at medical conferences. At its core, the syndrome is comprised of extreme abilities to compartmentalise information of the type found in scientific conferences, an episodic preoccupation with the surface of a science but inability to appreciate its substance (episodic logosagnosia) and a mood state that is heavily dependent on gratification from the range of outlets available at modern conferences. Current estimates of the frequency of the condition are that there are approximately 20 full-blown psychopharmacological carriers of the syndrome per 100 million populations. This should yield a figure of 200 in Europe and North America. If a similar phenomenon applies in other branches of medicine this would yield a further 1200 affected individuals in Western medical circles. It is of pressing interest to establish whether the Kraepelin–Fraud Syndrome exists to any degree in non-medical science, and whether there are differences between those sciences with and without significant commercial applications.


## Introduction

We describe a syndrome, which probably emerged in the 1950s, which can now be readily observed at medical conferences. At its core, the syndrome is comprised of extreme abilities to compartmentalise information of the type found in scientific conferences, an episodic preoccupation with the surface of a science but inability to appreciate its substance (episodic logosagnosia) and a mood state that is heavily dependent on gratification from the range of outlets available at modern conferences.

We are uncertain as to the aetiology of this syndrome and accordingly resisted the temptation to describe it as Dissociative Disorder (Congressional Type). Recognising a mild form of the disorder in ourselves, it was difficult to resist the temptation to be eponymised and indeed to be the first sufferers of a syndrome to eponymise themselves in medical history.

The pathophysiology of the disorder remains unclear. It is also unclear exactly what form a positive treatment outcome might take. As some of these issues might be clearer if the syndrome is found in branches of science other than medicine, we describe two cases in the hope that the description of syndromal variants or alternatively a failure to detect comparable disorders in other disciplines may shed light on the questions of aetiology and pathophysiology.

We focus initially on behaviours most commonly observed at the satellite symposia, which emerged at international medical meetings in the 1980s. The phenomenon has since developed to the extent that many major meetings have several satellite symposia running in parallel, with more delegates attending these symposia than sessions at the main event. But as will become clear this syndrome is not confined to satellite symposia. The cases described have given full consent but their details have been anonymised. These cases offer the possibility of outlining operational criteria.

## Case A

Case A is a middle-aged English-speaking male clinician, who has had a successful research career in a science contributory to psychiatry. He has been an office holder in a psychiatric or related association. He still contributes to lectures in the main programme of major meetings, where his contributions may be stimulating. He also regularly presents at a number of satellite symposia in the same meeting, sometimes exciting comment from observers as his schedule may involve leaving one symposium before it has finished to appear in another after it has begun.

The task is possibly made easier by virtue of the fact that he will often give essentially the same lecture in the different symposia with little variation except in the name of the drug. Pharmaceutical company observers have been noted to worry that he will mix up drug names. Audiences, however, report that mistakes with the name of the drug are one of the few things guaranteed to keep them awake, pointing to a possible deployment of embarrassment as a pedagogic opportunity.

In his lectures, A will often invoke examples of the patients that he sees, although, given the frequency of his presentations at meetings, it is not clear that he can have much time to see patients. This recalls a quip from Nathan Kline, a pioneer psychopharmacologist and perhaps one of the first sufferers from the syndrome, who when asked who did the work while he was away at meetings, replied that it was the same people who did the work when he wasn't at meetings.

A review of A's publications is of interest. While he has some regularly cited basic sciences articles, he also has a number of much more regularly cited psychopharmacological publications on aspects of therapeutics. A has revealed that some of these have been written by medical writers from communication agencies employed by pharmaceutical companies when planning symposia.

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In some cases, A may never have read articles with his name as sole or contributory author.

On occasion, when he has offered to prepare his own article in lieu, companies have responded that some points in the ghosted article were important commercially to them and that they will be able to arrange for another senior figure in the field to have the article, already prepared for A, published under that individual's name in the symposium supplement. This may happen even though this other author has not delivered a paper at the meeting. Certain senior figures, it seems, can be relied upon in this way.

Some of these "ghost-written" articles are very well written. It is of interest how medical writers working with communications agencies, who may be relatively new to a field, can produce articles on a subject on which they have never worked to a standard that can fool the rest of the field. Even more, they can produce articles in a style that is recognisably A's, for instance. Closer scrutiny, however, of A's articles or those of other sufferers of the syndrome, will sometimes reveal Americanisms or regional Anglicisms where they might not be expected.

However, it is not clear that the quality of the writing accounts for the extent to which some of these articles may be later cited. With his earlier work, A would have been gratified by 200–300 reprint requests. In recent years for this more clinically related work, he has had company requests for up 20,000 reprints of an article. It is not inconceivable that in due course, one or other of these articles from the later part of his career might become a citation classic. (Something he would feel was his due).

Other contributors to similar satellite symposia run by the same company sometimes feel that it would be useful to have some of the material used by A at a previous symposium to illustrate points in their presentations. The communication agency in such instances has written to A requesting his authorisation of the release of "his" materials for use by this other contributor. This situation is not without interest.

## Case B

B is a middle-aged European male clinician. Like A he has been involved in national associations related to psychiatry. He has had regulatory experience in both the assessment of submissions to regulatory bodies and in the production of such submissions. B is one of those experts to which a company may turn should they be having problems registering their compound in his country.

B is regularly used at international meetings in Europe and world-wide because of his command of English. One of the striking features of his lecturing is the dissociation between his reputation as a critical and skeptical lecturer when dealing with topics on the main programme of the meeting and the extent to which he may be prepared to offer apparently enthusiastic and uncritical endorsement for a compound in a satellite symposium. Very frequently this uncritical endorsement will involve the recycling of outdated ideas, which it is difficult to believe that either B or indeed many of his audience can conceivably believe and which indeed he may contradict within the hour at another symposium.

In addition to being a speaker, B regularly chairs symposia and has been noted to appear during the middle of a symposium to take up some of the duties of the chair, which he has not been able to fulfil during the first half of the symposium owing to his involvement in another symposium.

One of B's particular strengths is the press briefing, where he may field questions in a number of languages. Where once companies brought clinicians along to major meetings they are now as likely to bring along a large press corps and sometimes will bring members of the media rather than clinicians. B may often be seen on his way from a satellite symposium to a press briefing, chaperoned by members of a PR agency. B justifies these press briefings in that he has a somewhat cynical view of the clinical colleagues to whom he lectures at satellite symposia and feels that more significant public health gains can be achieved by getting materials into the popular press. Primary care physicians and others, in his opinion, are more likely to absorb the information contained in the accounts of presentations that appear from such press briefings than they are to read and be influenced by more detailed or lengthy articles appearing in other settings.

B also demonstrates features of what might be termed Kraepelin–Fraud Syndrome by proxy. This involves the production of similarly uncritical views on videotapes, which are then shown by company representatives to primary care physicians, nursing staff, trainee medical staff and others.

## Operational criteria

In line with current neo-Kraepelinian thinking, we put forward operational criteria for this new disorder for provisional inclusion in ICD-XI or DSM-V. An affected subject should meet at least 2 of criteria A–D and 2 more from criteria E–J. Fulfillment of all criteria A–D in the absence of any other features of the disorder will make the diagnosis, although this may represent a syndromal variant.

(A) A pervasive pattern of travelling to scientific conferences and talking about research data that he has had no involvement in generating.
(B) Episodic logosagnosia.
(C) Unusual abilities to compartmentalise information.
(D) Will have a significant number of "ghost-written" articles.
(E) Actively seeks admiration by peers and subordinates.
(F) An exaggerated sense of own talents, which can be inferred from expectations of recognition as an expert in the absence of commensurate achievements. Happy in the role of opinion leader.
(G) Has a sense of entitlement, i.e. unreasonable expectations of favorable treatment from symposium and congress organisers.
(H) Liable to profound dysphoria if not involved with the "academic action".
(I) May be unreasonably envious of the scientific achievements of others and is liable to denigrate these. Would also be unhappy if his colleagues had appeared on "educational" videos and he had not.
(J) Is unaware of the disorder quality of the syndrome.

We recognise that criteria B and C may require a certain amount of subjective judgement on the part of the rater. In the absence of other diagnostic tests, however, this is a hazard our putative syndrome shares with all other psychosyndromes. The risks of misdiagnosis might be minimised by inter-rater reliability training sessions and diagnostic interviews.

## Discussion

A number of questions are raised by these case reports. If senior speakers such as these two figures essentially present exactly the same thing about each drug and say things that are scarcely credible, why should companies continue to ask them? Participation appears to continue, however, even in the face of very poor feedback from delegates.

From a psychodynamic point of view, the syndrome appears to develop in senior scientists who are keen to be seen to be part of the action and would feel upset if they were not represented on meeting programmes. This leads to a certain amount of lobbying with programmes being constructed on a quid pro quo basis. This

can reach the point where it is uncertain how much control pharmaceutical companies have over the process.

As these are the opinion leaders within a medical specialism, companies may on occasions feel that even if the contributions from such figures are quite bland that it is at least prudent to have them "on side", as this will make them less likely later to say adverse things about a company's product. Some of these figures, indeed, can become so powerful that it is thought they have the capacity to break a pharmaceutical company should they become an enemy.

It should be noted that the situation we describe does not only apply to satellite symposia and symposium supplements. It also applies to symposia within the body of the main meeting and articles within the peer-reviewed section of many journals. Statements of company support for a symposium in the form of an unrestricted educational grant may indicate an increased relative risk compared with symposia not so designated but a more reliable mechanism to identify the products of this process is to follow those affected with the syndrome through the programme of a meeting and to scrutinise all their writings with some care.

There are unexplored medico-legal aspects to these developments. Lawyers pursuing personal drug-induced injury claims, increasingly come across material from a communications agency to senior scientists informing them that their article is enclosed. The medico-legal implications of this remain uncertain, especially if there are grounds for suspicion that a particular article has been produced to meet certain legal problems facing a pharmaceutical company. It is one thing to produce review articles of the type that have been outlined but clearly producing "studies" in this manner, that relate to the side-effect profile of psychotropic drugs may have significant legal implications.

There is, however, one possible benefit to this "ghost-writing" arrangement that should not be ignored. In the case of company only authorship lines, should a particular article later be the subject of legal interest, courts are likely to be unable to enforce the attendance of the company personnel involved for cross-examination. There is hope, in contrast, that some of the senior figures mentioned here would agree to testify in court, if only as a manifestation of the disorder from which they suffer.

Reliable estimates of the frequency of the condition in the population will depend on establishing agreed operational criteria to be used in prospective epidemiological studies. Our estimates are that there are approximately 20 full-blown psychopharmacological carriers of the syndrome per 100 million populations. This should yield a figure of 100 in Europe – excluding non-EC countries. The condition probably occurs at a slightly higher level of frequency in North America, giving a further 100 cases. If a similar phenomenon applies in gastro-intestinal, respiratory, anaesthetic, neurological, urological and cardiological branches of medicine as well as in paediatrics, at a roughly comparable frequency, this would yield a further 1200 affected individuals in Western medical circles. It is not clear if the condition is found to the same extent in surgery or obstetrics, where there are fewer drugs employed, although other specialities such as radiology would seem to provide the right conditions for the syndrome to flourish. It is of pressing interest to establish whether the syndrome exists to any degree in other branches of science and whether there are differences between those with and without significant commercial applications.

As regards the nature of the condition, it is common today to speculate on the evolutionary significance of syndromes. In this instance, however, the significance of the syndrome goes beyond simple plausible ecological significance. The condition arguably represents a rather pure proof of the Meme hypothesis of cultural evolution [1,2]. If this point is conceded, full-blown exemplars of the syndrome are perhaps worth studying in closer detail as they may provide pointers to evolutionary processes that are ordinarily more concealed from view. Somewhat problematically perhaps, proponents of the Meme hypothesis, at present, tend to exempt the scientific domain from their arguments.

## Conflict of interest declaration

The authors of this article have a conflict. Our schools of thought are being replaced by the clinical syndromes we describe here and we perceive this as a bias that needs to be disclosed.

## Authorship declaration

The authors declare that both contributed equally to the article and have analysed the material on both the cases reported here.

## Publication history

This article was first submitted 09.11.2001 to the British Medical Journal, for whom transmission by séance appears to differ qualitatively from transmission by uploading. Thankfully we found that one of the editors of Medical Hypothesis (DH) was not limited in this fashion. We hope other journals will catch up with the virtual world soon.

## References

[1] Dawkins R. Viruses of the mind. 1997. <http://www.physics.wise.edu/~shalixi/Dawkins/viruses-of-the-mind.html>.
[2] Dennett DC. Memes and the exploitation of the imagination. J Aesthet Art Critic 1990;48:127–35.

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