

Caring for Patients and their Disorders: Curiosities

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This column has now joined some of its companion columns in becoming a quarterly contribution to *SA Family Practice incorporating Geneeskunde*. It started as a derivative of the Royal Australian College of General Practitioner's 'continuous home evaluation of clinical knowledge' (*check*) programme with the resumption of publication of *SA Family Practice* in September 1999; and then moved on to its present 'caring for patients and their disorders' (CPD) identification – but retained its 'check' branding. I want to acknowledge Prof Julia Blitz's support during that time. With the subsequent development in joining forces with 'Geneeskunde', the 'CPD' aspect without the 'checks' has been retained.

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Introduction

This edition's Caring for Patients and their Disorders focuses on a few 'curiosities' gleaned from the evidence-based site 'Bandolier' <http://www.jr2.ox.ac.uk/bandolier/index.html> which is hosted by 'Pain Research' at the University of Oxford. They are associated with the Nuffield Department of Anaesthetics and the Medical School. A useful page for browsing the Bandolier site is their subject index page <http://www.jr2.ox.ac.uk/bandolier/subjind.html>.

A few years ago they published a small cluster of articles under the group title – 'Old Curiosity Shop' in which some intriguing research snippets from various sources were summarised and commented on. The closest equivalent to a 'curiosity shop' in the South African context would probably be an 'Antique' store. The curiosities considered by the Bandolier group were not necessarily 'old' articles. However, I have presented the 'curiosities' in the order in which they most appealed to my own curiosity.

Getting a sexually transmitted infection from the toilet seat?

This curiosity was based on a 1979 publication by Gilbaugh and Fuchs in the *New England Journal of Medicine*.¹ Their study was restricted to *N. gonorrhoeae*

however. The authors used a two-pronged approach to their investigation. The first was to determine the survival times of gonococci in various solutions added to toilet seats; the second was to culture the material on toilet seats in 72 men's and women's lavatories.

The findings of the first component:

1. Gonococci in saline could not be cultured from a toilet seat 10 minutes after being deposited on the seat.
2. Gonococci in broth could not be cultured from a toilet seat 10 minutes after being deposited on the seat.
3. Gonococci in a saline and urethral discharge mixture could be cultured from the toilet seat up to two hours after being deposited on the seat.

The findings of the second component:

1. Gonococci could not be cultured from any of the lavatory's toilet seats.
2. A number of skin pathogens were cultured.
3. The latter pathogens were predominantly found on the top surfaces of the toilet seats.

The authors concluded that it was not impossible to become infected with *N.*

gonorrhoeae through non-sexual transmission via dried purulent discharge left on the toilet seat – but that it was very unlikely. The mechanisms by which such transmission could possibly take place are left to the reader's imagination. The Bandolier summary does not indicate whether men's toilet seats or women's toilet seats were more contaminated – one would have to consult the original reference. Would a comparative study show any major differences between American and South African toilet seats? What would chlamydial survival times on toilet seats be?

So just who's crazy?

This curiosity could almost be called a medical 'antiquity' in publication terms. A 1973 article in *Science* detailed a Stanford study by Rosenhan.² In the first part, eight 'sane' people arranged appointments at various psychiatric hospitals and complained of hearing voices. Those participants with a mental health background, 'adopted' other professions for purposes of the study. No significant changes were made in the participants' life histories. All the participants were admitted, seven of them with a diagnosis of schizophrenia. Following admission, the participants ceased to simulate any symptoms and behaved normally. However, the diag-

nosis ‘stuck’ and none of the medical or nursing staff became aware of the deception. Fellow patients were more skilled at spotting the pseudopatients than the staff were, and 35 of 118 of them voiced their suspicions. (Clearly these were not overcrowded psychiatric facilities as could be found in many South African public sector ‘mental hospitals’.) The summary does not state to whom the real patients’ suspicions were voiced. At the end of the summary there is an indication that medication was prescribed for these pseudopatients, and the assumption must be that they did not take it. These details would need to be confirmed through reading the original article. The average stay in hospital was 19 days (the range was 7 to 52 days), and the discharge diagnosis was ‘schizophrenia in remission’. (It is not clear from the summary wheth-

er this diagnosis also applied to the participant who was not initially diagnosed with schizophrenia.)

Two other psychiatric hospitals doubting that such an error could occur in their institutions were told that over a specified three-month period, one or more pseudopatients would attempt to be admitted. A rating system was created for each staff member to assess the likelihood at presentation of a patient being a pseudopatient. One hundred and ninety-three patients were assessed. Forty-one patients (21%) were considered, with high confidence, by at least one member of staff to be pseudopatients; 23 patients (12%) were considered suspect by at least one psychiatrist; and 19 patients (10%) were considered suspect by one psychiatrist and one other staff member. In fact, not a single pseudopatient actually presented during

this time. This study would probably not be granted ethics approval were an attempt made to repeat it.

The effect of giving an optimistic message to patients

This next ‘curiosity’ is based on an article by Thomas published in the British Medical Journal in 1987.³ Provocatively titled: ‘General practice consultations: is there any point in being positive?’, the author explores the outcome after a ‘positive’ or ‘negative’ message about diagnosis, combined with treatment in some patients, or no treatment in other patients – and a corresponding ‘positive’ or ‘negative’ message about the efficacy of the treatment. The patients all presented with symptoms in which no firm diagnosis could be made. The symptoms included upper respiratory complaints: such as cough,

Table I: Effect of a positive consultation by general practitioner

	Positive consultation (better/total positive) n = 100	Negative consultation (better/total negative) n = 100	Relative benefit (95%CI)	NNT (95%CI)
Prescription given	32/50	21/50		4.6 (2.4 - 34)
No prescription given	32/50	18/50		3.6 (2.1 - 10)
Total (%)	64%	39%	1.6 (1.2 - 2.2)	4.0 (2.6 - 8.6)

Table II: Effect of treatment given in total sample

Prescription given (better/total) n = 200	No prescription given (better/total) n = 200
53/200 = 26.5%	50/200 = 25%

sore throat, nasal congestion, and cold; various aches and pains: such as abdominal pain, backache, headache, chest and/or breast pain, ear ache, muscle pains, limb pains, and neck pain; and generalised symptoms: such as dizziness and tiredness.

All 200 patients were randomised into four different groups. A single practitioner saw all the patients. (It would be necessary to refer to the original article to find out what mechanism of randomisation was used, whether the

patients with no firm diagnosis were consecutive, and if any mechanism was used to assess whether or not the practitioner had a higher rate of patients with ‘no firm diagnosis’ during the study period.)

The four groups were defined as follows:

1. A positive consultation in which the patient was given a firm diagnosis, given a prescription, and told

that it would certainly make them better.

2. A positive consultation in which the patient was given a firm diagnosis and told that they required no prescription to get better.
3. A negative consultation in which they were told (honestly) ‘I cannot be certain what is the matter with you’, given a prescription and told ‘I am not sure that the treatment I am about to give you will have an effect’.
4. A negative consultation in which they were told ‘I cannot be certain what is the matter with you’, followed by ‘and therefore I will give you no treatment’.

It is not clear from the Bandolier summary what the nature of the firm diag-

nosis given to the patient was. Wherever a prescription was given, it was for 3 mg thiamine hydrochloride. Negative consultations were closed by the practitioner asking patients to come back after a few days if they felt no better. Two weeks after the consultation each patient was sent a card asking:

1. Did you get better?
2. How many days after seeing the doctor did you get better?
3. Did you need any further treatment?

It is not stated in the summary whether or not any of the patients were lost to follow-up, but considering the table constructed by Bandolier, it would appear that all patients responded to the questions. The results in terms of one variable – getting ‘better’ – are summarised in **Table I**.

As can be seen, a positive consultation produced a higher proportion of patients getting better (64% or 32% of overall sample) than with a negative consultation (39% or 19.5% of the overall sample). The number needed to treat (NNT) for a positive consultation was 4.0 (2.6 to 8.6) for the patient to get better within two weeks. This means that one out of four patients, in whom no firm diagnosis can be made, and given a positive consultation, will get better within two weeks. As with all NNT calculations it is not possible to predict who this one patient would be. In calculating the NNT a positive consultation would be ‘drug A’ and the negative consultation ‘drug B’.⁴ For certain particularly well-informed patients, the consultation described as a negative consultation in the fourth group, may actually be experienced as a ‘positive consultation’.

The ‘effect’ of treatment on the entire sample of this study is summarised in **Table II**.

A number of confounding variables, including ‘self-limiting conditions’, have clearly not been accounted for in this summary. What does seem clear is that the practitioner was particularly accurate in reaching the conclusion of ‘no firm diagnosis’ in the patient sample. It would be very interesting to find out how South African patients in various

settings would respond to ‘positive’ or ‘negative’ consultations as defined in this study – although as with the ‘pseudopatient’ study referred to above, there may be ethical issues involved in attempting to repeat a study of this nature.

Comment: One of the most satisfying times of my own career was the period when, emerging from a prolonged major depression, I was working in a rural clinic, and made it my objective to see every patient leaving the consultation room either smiling or laughing.

Flowers, animals and the view from the window

The next few ‘curiosities’ have been lumped together. The initiating article of the ‘Old Curiosity Shop’ series included two summaries.⁵ One was a study of 30 elderly people, aged 75 to 81 years, to compare the differences after five months, of either being given a budgie to look after, or a begonia. A control group was given neither a budgie nor a begonia. A before and after 22-item questionnaire was used to assess the differences. Each question was assessed in terms of a ‘favourable’ change, an ‘unfavourable’ change, or ‘no change’. The results showed that those who were given budgies had the highest increase in responses, which were classified as favourable; while those in the control had the highest increase in responses which were unfavourable.

A few unforeseen variables had to be accounted for, however. A third of the people offered budgies refused them mainly on grounds of not liking to see birds in cages. Some of the budgies died within the first six weeks (but were replaced for the purposes of continuing the study). Nearly half the elderly people had either died or moved away or could not be contacted at the time of the follow up visits.

The authors of the original study are said to have commented that factors surrounding the budgie may have played as much of a role as the interaction between the elderly person and budgie.

These factors include the budgie becoming the focal point of conversation; and in some instances, the reason for visits from children who were trying to teach the budgies their names.

The second summary in this article included a study of the value of having a ‘service dog’ on the self-esteem and the amount of outside assistance needed by disabled people in wheelchairs.⁵ Twenty-four matched pairs of participants were randomised to receive a service dog either immediately, or after a year. The effects were assessed every six months. A ‘dramatic’ improvement was shown, and sustained, in those who received the dogs immediately. No changes were noted in the participants waiting for a dog, but similar changes as had been noted in the first group were noted in the second group within the first six months after receiving a dog.

Another ‘old curiosity shop’ selected study retrospectively assessed two groups of post-cholecystectomy patients in terms of length of hospital stay, analgesic use and comments on the patient’s recovery recorded by the nursing staff.⁶ One group had a view of a clump of deciduous trees (during summer months) from their hospital room; the other group had a view of a brown brick wall. The patients with the view of the trees did significantly better than those with the brick wall view – except in terms of postoperative complications.

House dust mites and their faeces; journal clubs

I find these curiosities^{7,8} particularly *uninteresting!* The first shows that steam cleaning is effective in killing house dust mites and neutralising the allergenic protein, Der p1, in house dust mite faeces. The article on journal clubs showed that if the person in charge (director) believes that a journal club is important, the attendance is likely to be higher than if the director does not believe journal clubs are important. The other finding is that residents (equivalent to our registrars) spent more time reading journals if there was an active journal club.

The last of the curiosities in the series was a study to do with the power

of prayer. This topic has previously been discussed in this journal⁹, and the Bandolier summary was not accessible from the website at the time of compiling this article (Old Curiosity Shop: the Power of Prayer <http://www.jr2.ox.ac.uk/bandolier/band46/b46-6.html>). [On the final day of editing, the summary miraculously became accessible again, so it should be available for those who are interested.]

Conclusion

Medical curiosities are sometimes intriguing, sometimes revealing, and perhaps sometimes too much of a good thing. It is interesting that on the Bandolier website, six 'old curiosity shop' titles appear and one extra article can be included in the total which does not include the actual phrase in the title. The last of the 'old curiosity shop' series appeared in March 1998. Perhaps this is because publishers and editors of journals today are more interested in publishing research that is not a mere curiosity; perhaps it is because there is so much pressure to publish in certain high profile journals (this includes South African authors); or perhaps some of the 'curiosities' are really not relevant or just confirm 'common sense', as, in my opinion, the curiosity concerning journal clubs.

If however, you are aware of published articles which reflect particular (South African) curios-

ities which you think might of interest to SAFP/G readers, please feel free to forward them to me.

References:

1. Old Curiosity Shop: The gonococcus and the toilet seat. Bandolier. <http://www.jr2.ox.ac.uk/bandolier/band40/b40-6.html> (accessed 29 August, 2003)
2. Old Curiosity Shop – On being sane in insane places. Bandolier. <http://www.jr2.ox.ac.uk/bandolier/band39/b39-8.html> (accessed 29 August, 2003)
3. Old Curiosity Shop: The importance of being positive. Bandolier. <http://www.jr2.ox.ac.uk/bandolier/band42/b42-5.html> (accessed 29 August, 2003)
4. Jobson M.R. To Prescribe or Not to Prescribe. SA Fam Pract 2002;25(3):20-24.
5. Budgerigars and Begonias. Bandolier. <http://www.jr2.ox.ac.uk/bandolier/band39/b39-8.html> (accessed 29 August, 2003)
6. Old curiosity shop: view with a room. Bandolier. <http://www.jr2.ox.ac.uk/bandolier/band49/b49-6.html> (accessed 29 August, 2003)
7. Old Curiosity Shop: House Dust Mite. Bandolier. <http://www.jr2.ox.ac.uk/bandolier/band41/b41-4.html> (accessed 29 August, 2003)
8. Old Curiosity Shop - Journal Clubs. Bandolier. <http://www.jr2.ox.ac.uk/bandolier/band43/b43-4.html> (accessed 29 August 2003)
9. Whitfield MJ. Does Prayer Work? A Randomized, Controlled Trial. SA Fam Pract 2000;22(1):38

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