³ Mason ML, Koch SL. Human bite infections of the hand, with a study of the routes of extension of infections from the dorsum of the hand. *Surg Gynecol Obstet* 1930;51:591-625.

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Full moon and poisoning

Acute poisoning is unusual among diseases in having an extremely short incubation period; patients or their relatives seek medical advice usually on the same day that the poison has been taken, and the time of poisoning can be established easily. In India the day of full moon, when the earth lies between the sun and the moon, is called "purnima." The relative positions of the sun and moon on this day are such that their gravitational forces on the earth act almost in a straight line, causing higher tides.¹ Water constitutes 50-60% of the body weight of humans. Possibly, as with sea water, body water might also generate some sort of tidal wave that increases on purnima days. These "human tidal waves" might cause physical, physiological, or biochemical changes in the body. The brain might also be affected by the process. As well as other factors that influence an individual to take poison, this phenomenon might affect the incidence of poisoning on purnima days. We undertook a study to investigate this.

Methods and results

We analysed all cases of acute poisoning admitted to the medical ward of Patna Medical College Hospital from January 1976 to December 1979. The dates of purnima days were taken from the Gregorian calendar and the number of cases of poisoning admitted on these days recorded (table). By subtracting the number of cases admitted on purnima days from the total number of cases the number of cases admitted on non-purnima days was obtained. Frequency distributions were calculated to show the number of cases of poisoning admitted per day for purnima and non-purnima days. Appropriate statistical analysis was done and significance assessed with Student's *t* test.

Forty-nine purnima days occurred during the study period, and 45 cases of poisoning were admitted on these days. No cases, one, two, and three cases per day were admitted on 16, 23, eight, and two purnima days respectively. The total number of non-purnima days was 1412 and the number of cases admitted on these days 796. No cases, one, two, three, and four cases of poisoning per day were admitted on 836, 419, 109, 33, and 15 non-purnima days respectively. The increased number of cases of poisoning admitted on purnima days as compared with non-purnima days is significant ($0.001 < p < 0.005$).

Comment

The impulse to take or give poison may be increased on purnima days owing to increased "human tidal waves." As the incidence of

poisoning is significantly increased on purnima days the incidence of other diseases may be similarly influenced. Other diseases are hard to study in this way, however, since an accurate time of onset is difficult to obtain retrospectively. Owing to causes that are not fully understood the heights of tides in different parts of the ocean are different¹; likewise, increases in the incidence of poisoning on purnima days may be different in different parts of the world.

We are grateful to Dr R Sharan, superintendent, Patna Medical College Hospital, for permission to collect and analyse the data, and also to the staff of the registrar's office for their help.

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¹ Monkhouse FJ. *Principles of physical geography*. 7th ed. London: University of London Press, 1971:363-70.

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The man who had not slept for 10 years

We report the case of a man who alleged that he had not slept for one single night since 1970.

Case report

The patient was a middle-aged man who had been in a road accident. After momentary unconsciousness he drove for three hours. He saw many doctors, complaining of headaches, difficulty in concentrating and in walking, and a total lack of sleep. Barbiturates, Mandrax, tranlycypromine, and clomipramine were prescribed. In 1974 he spent three weeks in the National Hospital, Queen Square, London, where his gait and visual difficulties were considered functional. A computerised axial tomography (CAT) scan suggested mild cortical atrophy (as did another in January 1980), but psychological testing showed no deficit. The clinical notes remarked: "disagreement with nursing staff over sleep pattern." After seven years of litigation he received £12 000 and costs, and, aided by continuing benefits, he stayed off work, exhausted through lack of sleep.

In August 1979, while staying in Edinburgh, he spent two consecutive nights in the sleep laboratory. His electroencephalogram (EEG) showed only occasional drowsiness. We did not know if he slept by day. In January 1980 he and his wife returned and were given a twin room. He declined to join ward activities, but found that his temperature was to be taken hourly. Unwisely, we allowed three hours in the evenings without close supervision. He did not sleep the first night, but on the second he slept from 6.20 am for 20 minutes until wakened. We learnt that his wife had stayed awake with him until 6 am. By the third day he was refusing to spend the night again with electrodes on his head, but after the three evening hours he was again cheerful and co-operative. Each self-registered temperature for those hours had been identical. He did not sleep that night. On the fourth day his speech was slurred and rambling, there were visual misinterpretations, he

Dates of purnima days according to Gregorian calendar, and numbers of cases of poisoning admitted on these days during 1976 to 1979

	1976		1977		1978		1979	
	Dates of purnima days	No of cases	Dates of purnima days	No of cases	Dates of purnima days	No of cases	Dates of purnima days	No of cases
January	17	0	5	1	24	1	13	0
February	15	0	4	1	23	0	12	1
March	16	1	5	0	24	2	13	1
April	15	2	4	1	23	0	12	1
May	13	1	3	2	22	0	12	1
June	12	2	1	3	20	2	10	0
July	11	1	{ 30, 28, 27 }	{ 0, 1, 1 }	20	1	9	1
August	9	0	28	1	18	2	8	1
September	8	2	27	0	16	1	6	1
October	8	3	26	0	16	0	5	0
November	6	1	25	0	14	1	4	1
December	6	1	25	0	14	0	3	2

looked dishevelled, and he walked around with his trouser fly open. He refused a Wilkinson vigilance test and seemed scarcely able to keep his eyes open. He and his wife insisted that he should spend the night without the electrodes. He was constantly observed till bedtime, when he demanded to be allowed up during the night to go for walks. This was agreed to and electrodes were applied. He and his wife talked loudly through the early night. He was out of bed from 2 am to 3 am. At 4 am he asked whether enough recording had yet been made. At 4.20 am he again got out of bed and stayed up until 5 am. At 6 am he fell asleep and slept, snoring loudly, till 8.30 am, when his wife woke him. He appeared disorientated, begged to be allowed to sleep, and said he must have been cured by an injection. The EEG appearances of slow-wave sleep and rapid eye movement (REM) sleep had been normal.

It was later put to him that the nurses at the National Hospital might have been correct in thinking he slept for two to four hours nightly, and that perhaps he underestimated his sleep. He and his wife departed angrily, he driving the car. In all things he had been dramatic, and each time he had completed the Stanford Sleepiness Scale, with its scores 1-7. He created a category 8.

Comment

People differ in their natural durations of sleep: some are happy on three hours' or less.^{1,2} Among the many investigations on this man only the CAT scan ever suggested abnormality. Dementia is associated with less sleep,³ but here was no clinical dementia, unless in his seeming unawareness that others must see him as an egotist. He may have been always a short sleeper, who, surrounded by medical opinions, cashed in on it. Dramatic statements about lack of sleep remain unreliable.

We thank Maureen Tomeney and Dr Colin Shapiro.

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³ Feinberg I, Koresko RL, Heller N. EEG sleep patterns as a function of normal and pathological aging in man. *J Psychiatr Res* 1967;5:107-44.

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Gift giving to hospital doctors—in the mouth of the gift horse

And thou shalt take no gift:
for a gift blindeth them that hath sight,
and perverteth the words of the righteous

—EXODUS, xxiii, 8.

Giving gifts by patients to medical staff is a widespread and common feature of hospital life. Despite the apparent frequency of gift giving and its reflection on the doctor-patient relationship, there are few published reports on the subject, and for this reason we undertook a prospective study of the experience of junior hospital doctors over a three-month period.

Methods and results

An explanatory letter was circulated to all 134 junior hospital doctors in the St George's group of hospitals. Letters were sent monthly for a total of three months from May to July 1979. The doctor was asked to indicate whether he or she had received a gift during that month. A follow-up questionnaire was then sent to those who had received a gift.

During the three months 374 questionnaires were sent and 295 replies obtained—a 79% response rate. Some 58 gifts were received during the study period, which represented 20% of the respondents. The table shows the departments of the hospitals in which the recipients worked. Four doctors received three gifts in three months and eight received two gifts. Forty of the 58 doctors who said that they had received a gift replied to the follow-up questionnaire (69%). The monetary value of the gift was usually below

Numbers of respondents to the initial questionnaire and the incidence of gifts according to department

Department	No of questionnaires sent	No of questionnaires returned	No (%) of gifts received
Accident and emergency	16	15	2 (13)
Anaesthetics	37	24	1 (4)
Cardiac surgery	12	11	2 (18)
Dental	26	16	3 (19)
Dermatology	7	6	2 (33)
Ear, nose, and throat	2	2	0
Geriatrics	9	9	1 (11)
Infectious diseases	9	8	1 (13)
Intensive care unit	3	3	0
Medicine (general)	34	27	5 (19)
Neurology	3	0	0
Neurosurgery	13	8	3 (38)
Obstetrics and gynaecology	20	16	12 (75)
Ophthalmology	5	5	1 (20)
Orthopaedics	11	5	2 (40)
Paediatrics	15	9	2 (22)
Pathology including haematology	43	37	0
Physical medicine	5	5	0
Plastic surgery	4	1	1 (100)
Psychiatry	51	51	13 (26)
Radiology	15	15	0
Surgery (general)	34	22	7 (32)
Total	374	295	58 (20)

£5, although one doctor received a cheque for £20. Alcohol (16 doctors), boxes of chocolates (six), and money, usually in the form of cash (four), were the most frequent gifts given. Only three doctors said that they had expected a gift from that patient. Twenty-two of the doctors felt that the patient had given the gift out of a feeling of gratitude, but two were given the gift before any investigation or treatment was started, two were given gifts by patients they had seen only very briefly in their stay, and three thought that the gift had been given in an attempt to manipulate them. Relatives gave a gift on behalf of the patient in a further two cases. One doctor refused a gift. The reaction to the gift was one of pleasure and surprise in most cases, but nine doctors stated that they felt embarrassment on receiving the gift.

Discussion

The interest generated among doctors invited to participate in this study is reflected in the high response rate to the initial questionnaire. Surgeons in general received more gifts than physicians, which is not altogether surprising, as surgical intervention in an illness often produces benefit more apparent to the patients than medical treatment. The obstetricians, by "giving" the patient the healthy child she hoped for, may expect to receive a token gift in return.

The presence of factors other than gratitude may partially explain the feelings of embarrassment experienced by nine of the doctors, feelings which may also be induced by the sense of obligation associated with receiving a gift.¹ This feeling of obligation may taint the doctor-patient relationship, leading to later regret at having accepted the gift.

The results of this study suggest that gifts to doctors are common and usually reflect gratitude. Some gifts, however, will place the doctor in a position of obligation to the patient and occasionally the present is an obvious attempt to gain preferential treatment or represents manipulation.^{2,3} Gifts of cash are considered unacceptable by some,⁴ and careful consideration before acceptance is recommended. It is perhaps due to the very ubiquity of gift giving in hospitals that its full meaning has escaped the notice of students of patient-doctor communication.

We thank Mrs V Minton of the medical staffing office, and all the medical staff who co-operated with us in this study.

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⁴ Anonymous. Accepting gifts. *Nursing Times* 1974 Jan 17.

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