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From brainwave to breakfast television

In the automo of last year Dr Norman Beale, an "ordinary general practitioner" from Calue. Withhere, published a paper on unemployment and health in the Journal of the Royal College of General Practitioners that caused both academic and media extrement. More paper are expected, and we asked Dr Beale to tell us how the began on this important project.

The idea came to me abruptly. I don't know why it happened or how. I can remember precisely where and approximately when; I was giving the lawn its first harrout in spring 1983. Several hundred of our patients had suddenly lost their jobs when the town's main employer. C & T Harris, had closed. Might this be affecting our practice workload? In seven vest I must have driven past the factory some five thousand time—several hundred more since the gates had been locked. Why had I not realized the possible consequence of closure before? Again, I didn't know and a first I dolf it must be a real but arrows care? I know hondring of the health of the most of the control of the control of the health of the control of the health involved in research when I didn't need more demands on my time why chase Alice down the rabbit hole?

In Cambridge I had been allowed the ultimate privilege of a British science docustion. The master of my college had won a Nobel prize for his work on the DNA formula and another don had just completed the amino acid sequence of human mogolobin. Neither had taught me in the formal sense, but I had glimpsed into their world to see men with folishes and presiduces like the rest of us. They were human but, more important, they were having fun. I remembered with pleasure the research prosect I done for a year after second MB. I had learned to use a library to advantage, to define aim.

The Health Centre, Calne, Wiltshire SN11 8NQ NORMAN BEALE, MRGGP, DLH, general practitioner

matths Medical forekart. Votem 292—29 Model 1980 the presenting problem, and whether the consultations somerand with a new problem or is a follow up consultation. Surprisingly little has been written about the effect of consultation. Surprisingly little has been written about the effect of consultation tume on the content of the consultation. One study that compared two practices which booked appointments at different rates showed that consultations that were booked at more frequent intervals were associated with more patients receiving prescriptions, more patients being asked to return for a further appointment, and more patients requesting a new appointment in the ensuing four weeks. These results, however, were not supported by a study in which patients were randomly allocated to consultations of different durations. In a study of patient satisfaction in relation to the duration of the consultation it was reported that patients were less satisfied and had more difficulty in communicating with doctors in short consultations.

sursible and had more difficulty in communicating with doctors in studie was designed to measure a variety of variables in This study was designed to measure a variety of variables. In This study was designed to measure a variety of variables in relation to consultations booked at different intervals of time and to test the following hypotheses. At surgery sessions that are booked at 5 minute intervals compared with surgeries that are booked at 75 and 10 minute intervals the following differences would be recorded; 11) Diocros would spend less time with the patients; (2) Fewer pratients would be savening and the same and the size of the patients of the patients

The study was carried out in the Lambeth Road Group Practice in south London in which five principals provide care for about 9000 patients.

EXPERIMENTAL SURGERY SESSIONS

Over 13 weeks each principal bodded three two boar experimental surgeries as 3 minute intervals, and 15 minute intervals, and five at 10 minute intervals. A total of 80 experimental surgeries were conducted, and a method was decived to ensure that equal numbers of the different types of surgeries took place in the morning and the evening and on the five working appointment bods. But the practice experiments were booked intervals and proposed and appointment bods. But the practice receptionists were instituted to book patients into these surgeries in the same way as they booked normal surgeries, with the exception that pentits were booked experimental profit the experimental presents were booked experimental surgeries. We record his heart run throughout the vission. He was also sheet of mark on a rating scale (see appendix his feelings of stress at the start of the session Patients) who attended these experimental sessions were welcomed by the too being audiotaped. Data were collected by means of the audiotapes and by the doctor completing an encounter sheet for each patient who attended the experiments before each patient who attended the experiments when the experiment and the experiment and the experiment and the experiment who attended the experiments who for each patient was staked to mark another appointment within four weeks. A detailed analysis of the verbal content of the tapes was made and will be reported interval to the experiment of the doctor completed the usual medical record of his feetings about the consultation on the rating scale and repeated this at the end of the session.

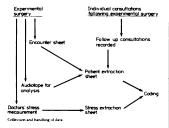
In the experimental sessions the doctors completed the usual medical record of his feetings about the consultation on the rating scale and repeated that the end of the session.

ANALYSIS OF DATA

ASALYSIS OF DATA.

After each consulting session the audiotape, the encounter sheet, the doctor's stress rating scales and cardiac monitor, the patterns' anwest not the strafaction questionnaire, and all the patterns' records were possed to the research administrator. The audiotapes were analysed according to a protocol which was developed once several weeks and designed to reduce curracted by one observer, but 6% of all tapes were checked by a second observer.

In testing the hypotheses the outcome variables, which in most cases were binary, were expressed as percentages. The percentage response in respect intervals of time. To test for the renders of a particular response to increase or decrease consistently in the sessions boaded at 5, 75, and 10 minutes logists, regression analyses were carried out. In these allowance was made for any effect of the gain and so of the pattern 45 with the pattern of the pattern 45 or for the gain and so of the pattern 45 or relation was detected. The figure shows how data were collected and handled.



TIME SPINT WITH PATIENT.

Table I prove the results of the analysis of the duration of face to face consultation between decision and patient as measured on the auditosper, Of the 780 patients, 222 provided complete tasper of consultations. The range of times spent with the patients varied from less than 1.5 minutes to over 20 minutes for all three types of surger season. The median time spent with each patient increased as the booking rate reduced. In the season booked at 5 minutes for all three types of surgery season. The median consultation times were 6.7 and 7.4 minutes for consultations that were instituted by the patient took longer than those minuted by the ductor in the three types of surgery, parts cularly in resonos booked at 5 minute intervals, where more patient times longer than those minuted by the ductor in the three types of surgery, parts cularly in resonos booked at 5 minute intervals, where more patient timated consultations occurred rable 1.

870 understood the importance of something I had known for four years; there had been, then, earlier redundances from the factory. Our present cleaning threat of 50 bits in the state of t

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of circulation figures. We comply first that this journal was the appropriate midwife for a paper in and about general practice, but our consuming worrives that it was all lego and that a referre would find manage break. If borth was the acceptance of the paper in July and a time for celebration then the christening came in November—a nowsylfaring and 10.5 and never stopped range of the paper in July and a time for celebration then the The photo rang at 10.15 and never stopped range of the proposed of the time of the contract of the proposed of the pro

My superinflated ego—oh, don't worry. The media have a way of dealing with these. As I was disconnected from the microphone at the end of my breakfast TV chat I saw the studio manager bring in the next guest—a life sized Rupert Bear.

Practice Research

The "five minute" consultation: effect of time constraint on clinical content and patient satisfaction

D C MORRELL, M E EVANS, R W MORRIS, M O ROLAND

has experiment was carried out in which patients who were seeling appointments for a consultation in a general practice is south condon attended consulting sessions booked at 5, 75, or 10 ninute intervals. The particular session that the patient attended was determined non-systematically. The clinical content of the consultation was recorded on an encounter sheet and on audionape. At the end of each consultation patients were invited to complete a questionnaire designed to measure satisfaction with the consultation. The stress engendered in doctors carrying out ungery ressions booked at different intervals of time was also measured.

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M O ROLAND, MRCP, MRCP, lecturer in general practice

The role of the general practitioner includes evaluating new symptoms of illness, providing continuing care for chronic disease, prevention, and health education. Which of this work is undertaken in the doctor's consulting room, and it might be appued that if more time was available the general practitioner would accomplish these tasks more completely. The average consultation time in British Published studies suggest that several factors affect the duration of consultations. "These include the age and social class of the patient.

TABLE 1—The median and range of times recorded on booked at 5, 7:5, and 10 minute intervals

		Consultation time		
Becking rate min	No of consultations	Median min	Range mir	
Discret initiated				
5	65	4 1	0.7-15-6	
7 4	96	6.4	16-19-5	
10	88	7.0	17-29-9	
Patient initiated				
5	155	5.5	1 5-20 9	
7.5	117	6.7	1 4-21 3	
10	102	7.9	10-198	

IABLE II—Percentage of consultations booked at different intervals of time at which examinations took place, for doctor and patient instituted consultations

		Consultations : min -					
	D	octor initia	aed	Р	HEDI INIII	led	
Examination carried out	5	7.5	10	5	7.5	10	
Any examination	41	55	61	77	76	65	
Ear, nose, and throat	•		9	22	12	Ī	
Chest	8	7	11	16	16	15	
Cardiovascular system	1	3	4	3			
Blood pressure	18	27	29	7	8	1.2	
Abdomen	1	,		12	8	5	
Vaginal*	2	10	10	5	11	7	
Rectal			3	2	1	- 1	
Joints	3	3	4		10	- 10	
Skin			11	21	21	21	
Nervous system				2			
Eves		1	2	3			
No of consultations	90	117	114	195	145	125	
*No of consultations of women over 16 years	47	70	61	101	88	70	

onulations for scate illness of the upper respiracy trace, and general restinations. The agent is a second proper to the second pressure. These traces is the agent of the second pressure interests of the second pressure. These traces have present in the doctor and patient ministed consultations. Overall, soled pressure was recorded at 10% of consultations booked at 5 minutes, at 10% of 27 minute seasons, and at 20% of 10 minute season. For women re-tors the second pressure and the second pressure and a 5% of consultations between the second pressure and the second pressure and a 5% of the minutes.

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Prescriptions were issued at 59% of consultations in the 5 minute sessions compared with 65% and 62% in the 7.5 and 10 minute sessions. Antibotics were more likely to be prescribed in surgeries booked at shorter intervals, where the prescribed more offers in sessions booked at 5 minute intervals, this was not accounted for by the higher proprietion of parient intervals, this was not accounted for by the higher proprietion of parient intervals, this was not accounted for by the higher proprietion of parient intervals which took place at these resisons. Psychotropic drugs were slightly more likely to be prescribed in sessions booked at longer intervals.

TABLE III—Events recorded per 100 consultations

	Consultations booked at			
Events recorded per 100 consultations	5 min	7.5 min	10 min	
Referral to specialist		4	10	
Referral to other health worker	4	5.	6	
Hospital investigation	9	10	10	
Prescription issued	59	63	62	
Antibiotic prescribed	15	10	11	
Psychotropic drug prescribed	6			
Return consultation booked	16	12	18	
Two or more problems recorded	- 11	16	22	
A psychological problem recorded	•	14	12	

DOCTORS' STRESS

Consultations			
* mun	? 5 min	10 min	
110:08	98.05	10 6 0 7	
72 4 4 2	20 3:35	70 1 1 4	
	11 0 :0 8	11 0:0 8 98:0 5	

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TABLE V—Percentage response to questions in the "satisfaction" questionnaire in-relation to surgery systoms booked at 5, 7.5, and 10 minutes. (Number of patients instructive outsion in northleses).

		Booked rate		
Responses to satisfaction questionnaire	5 min	7:5 min	10 man	
Little or far 100 little time available	3.7:245	1 8 : 224	0 5 200	
Felt "very free" to discuss problems "Very satisfied" with information received about condition (of those who said that they	67 2:238:	74.9 219	78-7 ,201	
needed information: Received enough information about management of those who were given a	89 6 : 134 ·	90-6 - 128	93 3 134	
prescription	91 6:143:	96 0 124	97-2 10	

In interpreting the results of this study it is important to bear in mund its luminations. The doctors who took part in this experiment formally book patterns at the rate of nine patients an hour [67] minutes per patient). This is supposed to cover not just the time spen face to face with the patient but also time taken to complete records, request forms, collect and dispose of instruments and specimens, and call new patients from the waitingproon. The times recorded in the study represent face to face consultation time and were derived from the sudosings. Intentionally avoided discussing bow they would use the citra time made available by longer consultations. The changes which were recorded in the content of the consultations. The changes which were recorded to work within the time allotted for each patient, but they were under the indirect pressure of knowing that if they did not the waiting room would fill intended to the content of the consultations. The changes which were recorded to expect which were the content of the consultations are presented to the content of the consultations. The changes which were recorded to work within the time allotted for each patient, but they were under the indirect pressure of knowing that if they did not the waiting room would fill repuly required to the content of the consultations. The supple study and the equally likely to attend sessions booked at five munite intervals as at longer intervals. There is evidence, however, that more availability of appointments in the five minute sessions resulted in more patients with acute illness booking into these sessions at the ast minute than into the other sessions. The sample sare was calculated to show differences of 10% in the rate of events which occur at approximation of 10% in the rate of events which occur at approximation of 10% in the rate of events which cover at approximation of 10% in the rate of events which cover at approximation of 10% in the rate of events which cover at approximation of 10% in the rate of events

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doctors spend with patients 10-7 to 29 9 minutes). It is also clear that the doctors in this study could not cope with consultations booked at 5 minute intervals, spending a median time of 5.2 minutes face to face with patients, to which must be added time to complete records, time for patients to be called from the waitingroom, time for handling persunens and interventions and some better they had adequate time the doctors complained of inadequate time at about one quarter of the consultations booked at 7.5 minute intervals. In the past the "five minute" consultation has been held responsible for patients being inadequately examined, too many being referred to hospital, and for one many drugs being prescribed. The data collected in this study indicate that the five minute consultation can said up to this crinicism, the study a consultation consultation can said up to this crinicism, the study a consultation consultation can said up to this crinicism, the study a consultation consultation can said up to this crinicism, the study a consultation that the study indicate that the five minute consultation can said up to this so clear that the doctors in this practice, working under the constraint of five minute bookings, were always working behind the clock and had no spare time for good record keeping. Some aspects of modern general practitioner care are therefore likely to suffer of consultations are booked at too frequent intervals, and there is some evidence from this study that booking consultations at longer intervals will also the better care and greater patient studiation.

This study was supported in part by a grant from the Department of

This study was supported in part by a grant from the Department of Health and Social Security. We thank the doctors in the Lambeth Road Group Practice, Wanson, D Shape, C Watkins, and L Zander, who submitted themselves to this detailed examination, and the patients who cooperated. Mrs J Bartholomer for analysing the adolesce, Mrs WEVani for conducting the study as practice manager, and Mrs. C Stephenson for typing protocols, questionnations, and repeated darlis, Mrs. A Conwheler for analysing the electroacidegraphs, and Mis M Morgan for preparing the questionnation on studiescion.

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					he surgers, picus Extremels
	or heude cach of t	he wiedi whi	h best describe s	our feelings	

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	3	2	4	4	5
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	1	2		4	
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types of surgers the datarbotion of consultation times and of numbers of statements recorded in each category was very slew. The results are recorded in each category was very slew. The results are recorded in each category was very slew. The results are recorded in each category was very slew. The results are recorded in each category was very slew. The results are recorded in each category was very slew. The results are recorded in each category was very slew. The results are recorded in the recorded in

TABLE 1—Percentage of consultations in which number of statements was greater than the overall median

	Overall median No of statements		Surgenes booked at	
Statements	per consultation	5 min (n = 220)	7.5 min (n = 213)	10 min n = 190
	Statements I	ry doctor		
Social exchange	0	30-5	31.5	17.4
Encouragement facilitation	1	47.3	47.9	55 gee
Asking question	7	42.7	49 8	57 9**
Psychosocial question	0	43.2	45.1	49 5**
Explaining problem	,	41.8	36.6	43.2*
Explaining management		41.8	41.8	45.8*
Positive response to psychosocial lead	0	3.6	7.5	7.9
Negative response to psychosocial lead	ė.	0.9	19	1.1
Interrupted patient	ė.	9.1	12.2	10.5
Prevention health education	0	34.5	16 9	22:1**
	Statements b	y paterni		
Social exchange		31 8	31.0	56 3
Presentation of problem	7	40 0	45:1	46 3**
Answering question	7	35 9	45.1	56 3**
Problem related expression		40.5	79 O	41.6
Asking question		36.4	36-2	19 5

*Test for trend significant p<0.025, **test for trend significant p<0.001

	Pe	rcentage of consultate	NOS
No of statements on prevention-health education	Booked at 5 man n · 220	Booked at 7.5 min in 213	Booked as 10 min n - 190
0	85.5	83.1	77.9
1	12.7	14.6	17.4
>2	1.8	2.1	4.7

STATEMENTS BY DOCTOR

STATEMENTS BY DOCTOR

Social richage, D1—Initial greetings were excluded in the definition of social exchange, D1—Initial greetings were excluded in the definition of social exchange was recorded in 0.7% of consultations, with no significant trends between the three types of surgery.

D2—An surgery existing the provided more than once in 5% of consultations, compared with 4.7%—An surgery existing social s

STATEMENTS OF THE PATTENT
Persentation of problem and antisering questions 1P.2 and P3.—The recording
of these statements was predictably related to the number of questions asked
by the doctor, and then were recorded more often in the surgeries booked at times in 4P%, 45%, and 46% of consultations, and "answering question"
recorded more than seven times in 86%, 45%, and 56% of consultations in surgeries booked at 5,7% and 10 minute intervals respectively
greatest produced to the surgeries booked at 6,7% and 10 minute intervals respectively
particularly appeared less likely to ask many questions in the surgeries booked as
for cample, for questions of the parties in the three galeet in 8% of surgeries booked at 5 minute intervals compared with 8% of surgeries
booked at 5 minute intervals compared with 8% of surgeries
booked at 5 minute intervals compared with 8% of surgeries

Discussion

In this study substantial efforts were made to minimise withinobserver and between-observer variation in the analysis of the
audiotages. It was possible to achieve a high degree of withinobserver consistency. Since one observer analysed all the tages in
the study we believe that the differences reported between consultaIn interpreting the results the time constraint under which the
doctors were operating needs to be considered. In surgeries booked
at 5 minute increash the median time face to face with patients was
5.2 minutes—so the doctors were inevitably always running late.
The median face to face time in the 7.5 minute surgeries was 6.7
minutes, leaving an average of 50 seconds for writing notes, etc. In
the surgeries booked at 10 minute intervals the doctors were under
the surgeries booked at all onger intervals. The largest
differences were in statements relating to history taking by the
doctor (facilitation, asking question, asking prochonical questions)
and in the patient's response (presentation of problem, answering
questions).

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The "five minute" consultation: effect of time constraint on verbal communication

M O ROLAND, J BARTHOLOMEW, M J F COURTENAY, R W MORRIS, D C MORRELL

In a study in which patients were allocated non-systematically to surgeries booked at 5, 75, and 10 minute intervals 623 consultations were tapercorded. In surgeries booked at longer intervals doctors used the extra time to take a fuller history from their patient. In surgeries booked at 10 minute intervals doctors speat more time explaining the patient's problem, explaining the proposed management, and in discussing prevention and health education, these increases not being evident in surgeries booked at 75 minute intervals.

Introduction

Effective communication is an important part of the development of a successful relationship between a doctor and a patient. Poor interviewing technique may lead to the doctor failing to appreciate the patient's problems, the patient failing to understand instructions and comply with treatment. 'and reduced patient satisfactions, specific arranging in interviewing disk to becoming part of the patient. Yes the accordance of the patient is straightful and comply with treatment.' and reduced patient satisfactions, 'specific arranging in interviewing technique may, however-require spending more time with the patient. Verby et al showed a substrainal improvement in interviewing technique in a group of Welsh doctors who undertook weekly training sessions, but the improvement occurred at the expense of a 40% increase in the duration of consultations for both the doctors who had received training and consultations for both the doctors who had received training and excluding a function of the time available for the consultation of the time available for the consultation. This study were assigned arbitrarily to surgeries that were booked at \$5, 25, or 10 minute intervals. The effect of this time constraint on clinical content and patient satisfaction is reported in the previous paper.' This paper reports the effect of the time constraint on the verbal content of the consultations.

During the study patients who attended certain surgeries in a group practice of the partners in south London were booked at 5, 75, and 10 mute intervals All "experimental" surgeries were booked for two hour operations, and surgeries were booked so that each partner would do three mute intervals, and surgeries were booked so that each partner would do three minute intervals, and five booked at 10 mainted intervals. "Extra" unbooked patients were not permitted to book for experimental surgeries.

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ondence to: Dr M O Roland, 125 Newmarket Road, Cambridge CB5

On arrival at reception all patients who were booked for experimental surgeries were asked for written permission for their consultation to be audistaged. The verbal content of the audistaged consultations was subsequently analysed by BT. The method used to analyse verbal behaviour in the consultations was unsudiated and the first open and the standard rating seal see sepaped at the research assistant insteared to the actual content of the standard rating seal see sepaped at the research assistant insteared to the excurred—for crample, statement by device replanning treatment or question asked by patient The method used was modified slightly from that described by Ban to include aspects of the consultation that were thought facility to the alternative part of the statement of t

subjects. For the main analysis the number of statements recorded in each of the 15 specified categories was compared for patients in the three different types of surgers. A test for trend in the mean number of statements among patients from \$2.5 s, and 0 minute surgeries was carried out, assuming that the number of statements followed a Posson distribution. It was possible to do this by ourse the figure model facility in OLIM.

BRITISH MEDICAL JOURNAL VOLUME 292 29 MARCH 1986 Morrett Dr., Evans ME, Marris EW, Robad MO. Dr. Bur minuter Consolitation effects of time contrasting on the advanced apparent variation. Br Med J 1986, 23: 100. Orientation of the advanced apparent variations are present present variations. Med J 2nd 1976, 28: 202. Ban DR. Dr. Coveres of physical princip communication in tends pressure. J Para Principals 2015. Arming P. Santonia methods in media streams. Debad Sala Serie 1979, 2016. Arming P. Santonia methods in media streams. Debad Sala Serie 1979, 2016. Arming P. Santonia methods in Debad Salament of Reportations on 1979.

results of this analysis indicate that the doctors used the time available in surgeries that were booked at longer intervals to spend more time talking and historing to their patients. The increased time spent talking with patients in less heavily booked surgeries is likely to be related to our previously reported results of more problems being detected by the doctors in these surgeries and greater satisfaction on the part of the patients. Such change was noted in surgeries booked at 10 minute intervals. These included statements by the doctor explaining the patient's problems, statements explaining management, and statements on prevention and health education. In surgeries booked at 7-5 minute intervals doctors were still working under considerable pressure of time, and little extra time was devoted to these important aspects of the consultation. A change in the booking rate to 10 minutes seemed necessary to statements were recorded. Despite this only a small proportion of the total time was spent on giving information to the patient and on health education. Doctors are being encouraged more and more to expand their roles in prevention and health education. The results of this study show that the general practitioners dud not fulfill these roles when working under severe time constraints. When more time was made available better communication occurred between doctors and were booked at different intervals of time supports the conclusion reached in our preceding pager that some aspects of modern general practitioner care are likely to suffer it consultations are booked at tool frequent intervals.

This studie was supported in part by a grant from the Department of Health and Social Security. We thank the doctors in the Lambeth Road Group Practice, Marson, D. Bhry, C. Walkons, and J. Zander, who submitted themselves to this detailed examination, and the patients who experted. Mnw. M Evans for collaining the data, Mnw. Wearis for conducting the study as practice manager, and Mns.C. Stephenson for typing protocol, questionnaires, and repeated days.

- Kelerences

 Make 1, Condition 10, Male 3, Dominators of the ability of general processors in development of the Male 3, Male 3

Com	sultation rating scale	
Daxi	•	
DI	Secual exchange	
D2	Encouragement of tacilitation	
D3	Asking question	

Patient
P4 Problem related expression
P5 Asking question

As you listen to the tape put a tick in the appropriate space each time one of the exents D1 to D10 or P1 to P3xx2rs. At the end of the consultation add up the scores for individual types of behaviour.

consistent of the properties o be used to the success.

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Section

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Transferred in the problem and management include all statements.

2. Summers along problem and management include all statements are straight representations. The first which were been been present problems to be extended for the first which were been depresent problems of the beautiful frequency for present as a whole rather than supply extensionally depended been shad to be compared for the problem of the problems and the strain frequency and an arrangement of the problems and the above meets to be removed to problem and the first problems and the above meets to be removed to problem and the problems and the above meets to be removed to problem and the problems and the above meets to be removed to problem and the above meets to be removed to problem and the above meets to be removed to problem and the above meets to be removed to problem and the above meets to be removed to problem and the above meets to be removed to problem and the above meets to be removed to problem and the above meets to be removed to problems and the above meets to be removed to problems and the above meets to be removed to problems and the above meets to be removed to problems and the above meets to be removed to problems and the above meets to be above meets and the above meets above the bestiming a relative to the above meets above the bestiming a relative to the above meets above the bestiming a relative to the above meets above the bestiming a relative to the above meets and the above meets

A good deal of sensition has been excited in Milan, by the loctures and experiments of a certain Spore Donato, on admittedly assumed name, who has been reproducing the ordinary phenomens of mentiories an amount of the susceptible citizens of the capital of Lombardy. It would have been quite unnecessary to drive the attention of the readers of these columns to the well-known results of expectant attention and successions reception of suggested sides which are to clambar to the profession in our country, and in Germany, were it not for the purpose of showing that the falian authorities have the power, apparently of pottugal segal over on all such proceedings, if the ser exceeding capital services of the control of the purpose of showing that the falian authorities have the power, apparently of pottugal segal over on all such proceedings, if the ser exceeding capital services are considered to the profession of the possing of a motion by the Medical Society of Milan, that the experiments were injurious to the nervous systems of those who submitted to them, and referent the matter to the central authority at Rome, who consulted the Upper Sanitary Council of the

Kingdom Baccelli, the President of the Council, having requested and obtained permission to summon some of the fealing Italian physiologists and psychologists to the assistance of the sanitary members, a meeting his protection of the liberty of every person, it is essential to prevent experiments which, while abolishing the consciousness of actions, produce morbid physical effects on presisposed persons, and restinate to prevent on the will of others. The Council says that public displays of hypostem must produce great disturbance in the nervous succeptibilities of the spectators, and maintains that physiology and clinical experience offer deciate groot of authorities to act on this opionou, and this such experiments a Donato's will be no longer tolerated in any Italian city where the Prefect, or his representative, thinks it worth while to interfere. [Brinsh Medical Journal 1886::1225.)