

# Sickness Absence: Facts and Misconceptions

PETER TAYLOR, MD, FRCP, DIH, Chief Medical Officer, The Post Office

Sickness absence, or more precisely, absence from work attributed to incapacity, is now an increasingly important problem, whether viewed in economic, social or strictly medical terms. Although direct costs to the taxpayer are about £555 million in national insurance and supplementary benefits to the sick and injured, the full cost to the national economy is very similar to the entire annual expenditure on the National Health Service (Office of Health Economics, 1971). In view of this it is unfortunate that the subject is one that seems to encourage a welter of conflicting, emotional and often misinformed statements, which do little to clarify and still less to solve the problem.

The Czar Nicholas once described Turkey as 'the sick man of Europe'; today there are some who apply this to Britain. 'The English sickness' is also often used by overseas commentators to describe a condition of high levels of absenteeism—mostly ascribed to sickness—strikes and other problems associated with poor economic growth. Managers in other countries are said to be concerned lest their employees catch this complaint, and there are many in this country who believe (incorrectly) that our sickness absence rates are higher than those elsewhere. Some attribute this to the Welfare State in which sickness absence is encouraged by over-generous sickness and other benefits. Others blame the stresses and strains of life in an industrial society and the conditions under which people work. Perhaps the favourite target, however, is the medical profession which is responsible for the issuing of the necessary certificates of incapacity.

This article considers the scale and nature of the problem and discusses the validity of such accusations. Nevertheless, there does seem to be a paradoxical situation in which real improvements in the standards of living, health care and the working environment have been associated with rising trends in medically certified incapacity for work in this and in many other countries.

## THE RISING TREND

During the year ending June 1972, the last for which full figures can be obtained from the Department of Health and Social Security, the insured population in Britain sustained 324 million days of medically certified

incapacity. About 17 million of these were ascribed to industrial injuries. This total was about 11 per cent less than that recorded for the year 1969-70 during which there had been a large epidemic of A<sub>2</sub> (Hong Kong) influenza. A detailed analysis of the trends since the war by Whitehead (1971) demonstrated, by excluding absence due to influenza and making allowance for demographic changes, a steady rise since the early 1960s. It would seem from the weekly returns in 1973 that this rise is still continuing.

Contrary to general belief, the days of incapacity are not actually working days, for there are important limitations to the data, two of which substantially over-estimate working days. Firstly, the sickness benefit figures include all those who are permanently disabled until they reach pensionable age; almost one-third of the total days are incurred by such people who do not and never will have a job. Secondly, the days are calculated on the basis of a six-day week (312 each year) regardless of public or other holidays, even though most employed people are nowadays only expected to work for about 240 days. On the other hand, brief spells of absence lasting up to three days are not counted at all and the figures do not include certified absences among members of the forces, non-industrial civil servants or Post Office staff. Incapacity of married women at work is understated because most of them choose not to insure for sickness benefit even though they must do so for industrial injuries. It is, however, possible to make some allowance for these factors and it is likely that the annual average sickness absence in this country is currently about 10 working days or 14 calendar days.

Some confirmation of this has recently been published in the introductory report of the General Household Survey (Office of Population Censuses and Surveys, 1973). This sets out results of the first year's interviews of what is now a continuously running survey covering a small but carefully selected sample of private households all over the country. Those interviewed were asked, among a large number of questions, whether they currently had a job and, if so, how many working days they had lost due to illness or injury in the preceding fortnight. The results (Table 1) show that in the sample of men, just over 5 per cent had lost some time in the two weeks, and that around a mean of 9.1 days per man per annum there were wide differences between socio-economic classes.

When the survey has been running for longer, it should be possible to learn more about trends in sickness absence. There is, nevertheless, a problem of under-reporting inherent in such interviews, as a special study linked to a similar survey in the United States has demonstrated. Thus, in a group of men interviewed who were known from other records to have consulted a doctor in the previous two weeks, only 60 per cent admitted to, or remembered, this

TABLE 1. Absence from work due to illness or injury in 1971.  
Men in employment (General Household Survey, 1973)

Socio-economic group	Per cent absent in a 2-week period	Average work days lost per man per year
Professional	3.7	3.9
Employers/Managers	3.7	7.2
Junior non-manual	4.4	6.7
Skilled manual	5.7	9.3
Semi-skilled manual	5.6	11.5
Unskilled manual	8.8	18.4
Average	5.2	9.1

consultation (U.S. Department of Health, Education and Welfare, 1965). Such errors will be of less importance if survey information is compared from one year to the next, but they do make comparison with documentary evidence from medical or social security sources less useful.

Another source of information can be found in the records maintained by employing organisations and, like sickness benefit records, they are a great deal more reliable than human memory. Unfortunately, with a few notable exceptions, this information is not generally available and some firms are extremely reticent about revealing just how much time they do lose due to sickness. My enquiries over the past few years have shown a wide range in rates from one organisation to the next, but have confirmed the underlying upward trend.

The Post Office has kept comprehensive records of all absence among its staff for many years and, as a large national organisation employing over 400,000 people, they are of considerable interest in this context. Here, too, there has been a substantial rise since before the war, but as Long (1968) demonstrated from annual rates since 1919, the steepest rise occurred between 1949 and 1953 and rates since then have risen less steeply than the national ones. Perhaps the most widely known detailed analyses have come from London Transport since 1949, and in a new study, Ager and Raffle (1973) have demonstrated that the crews of London buses take a great deal more sickness absence, particularly in short spells, than they did 20 years ago. These, and the other reports described above, have all shown that there have been substantial changes in recent years. A higher proportion of the working population is now taking time off work attributed to incapacity and those that do so are taking more spells than used to be the case. The increase in spells lasting up to three weeks has been most noticeable, and what is most disturbing is that young men continue to take frequent spells as they grow older. The prospects for the future appear to be poor.

REGIONAL DIFFERENCES

Sickness rates in various parts of Britain have long been known to differ, and similar variations apply to indices of mortality, medical consultation rates and so on, even though they tend to be less marked. For sickness absence, areas north and west of a line from the Humber to the Severn have rates substantially higher than the rest. Wales has always been top of this particular league table, and the high rate can only partially be explained by coal mining and other heavy industry. There is evidence to suggest that broader economic and cultural factors are more important (Taylor and Pocock, 1969; Gardner *et al.*, 1969), and the possibility of genetic factors has also been raised (Ashley, 1968).

I have compared the latest figures for sickness benefit in the regions with those from 1953-54 and found that the differences are now even more marked. This raises disturbing questions, as the increase in rates has been disproportionately large in those parts of Britain where they were already well above the average. The favoured South-East and East Anglia, on the other hand, have scarcely risen at all (Table 2). It would appear that regional development programmes for depressed areas have not yet had beneficial effects upon sickness absence. Some results from the General Household Survey confirm

TABLE 2. Sickness absence by area of Britain: comparisons between 1953/4 and 1971/2. Days of certified incapacity for sickness benefit per man

Area	1953/54	1971/72	Increase in 18 years (per cent)	
Wales	20.2	30.6		52
Northern	16.4	24.0		46
Yorks and Humber	14.1	20.4		45
North-West	14.1	19.8		40
Scotland	14.7	19.4		32
E. Midlands	11.9	15.0		26
South-West	12.5	15.3		22
W. Midlands	11.9	13.8		16
East Anglia } South-East }	10.1	11.6 } 10.1 }	10.2	1
All areas	12.8	15.9		24

these differences and demonstrate similar ones in other indices of health and of employment.

Post Office figures are of particular interest in this context as the occupations of its staff are closely similar all over Britain. Although the annual analyses show a general pattern similar to that already described, the disparity between areas is smaller and, although Wales has most often headed the league, it did not do so every year and in 1971-72 it came second to the North-West Region. This matter clearly requires further study because it may well

provide further clues towards a solution of the problem of rising rates of sickness absence.

#### PATTERNS OF DIAGNOSES

As medical certificates are handed to patients, the value of the diagnoses written has sometimes been questioned. It is true that certain conditions are rarely reported on these documents, cancer and venereal disease for example, but studies have shown that for the more common causes of temporary incapacity there is good agreement between the certificate and the subsequent opinion of a second doctor (Ministry of Pensions and National Insurance, 1965). This applies particularly if broad diagnostic groups are used. A recent follow up study of men hospitalised for inguinal herniorrhaphy (Semence, 1973) showed that while only 5 per cent of the men had this specific diagnosis on their subsequent certificates, 81 per cent were described as 'repair of hernia'. The main causes of certified incapacity, with the notable exception of influenza, change little from one year to the next. Combining figures for sickness and industrial injuries for men in the year ending in 1972, the total days and days per man at risk are set out in Table 3.

TABLE 3. Certified incapacity for work. Men in Great Britain 1971/72 (DHSS 1973)

	Days (Millions)	Days per man
Respiratory (Bronchitis, 28.9; Influenza, 8.2)	54.2	3.61
Injuries (Non-Industrial; 23.8, Industrial, 15.3)	39.1	2.61
Circulatory (CHD, 16.5; Hypertension, 6.4)	38.3	2.55
Musculoskeletal	26.4	1.76
Ill-defined	23.2	1.55
Psychiatric	20.1	1.34
Digestive	15.5	1.03
Other diseases	37.9	2.53
	254.7	16.97

Probably of more interest to physicians are the considerable changes that have taken place in the pattern of some common conditions since the year 1953-54. Some diagnoses have become less important as causes of sickness absence among insured men (Table 4), but others are a great deal more so (Table 5). The marked reduction in both spells and days due to pulmonary tuberculosis will come as no surprise, but the fall in rates due to gastric and duodenal ulcers is less easily explained. Lists such as these may be only crude representations of trends in disease in the community, but they do raise questions for which answers are required. Advances in therapeutics and other

methods of diagnosis or treatment may provide explanations for some, but by no means all, of the changes listed in Table 4.

TABLE 4. Changes in sickness absence diagnoses over 18 years. Men in Great Britain. *Decrease* in days and spells per capita in 1971/72 as per cent of 1953/54

	<i>Days</i>	<i>Spells</i>
Kidney infection and cystitis	77	101
Eczema and dermatitis	66	82
Gastritis	65	86
Asthma	50	62
Septic skin disease	49	43
Appendicitis	49	50
Pneumonia	38	38
Ulcers, stomach and duodenum	34	39
Respiratory tuberculosis	14	15
All causes	123	129

TABLE 5. Changes in sickness absence diagnoses over 18 years. Men in Great Britain. *Increase* in days and spells per capita in 1971/72 as per cent of 1953/54

	<i>Days</i>	<i>Spells</i>
Sprains and strains	368	343
Nerves, debility and headache	362	235
Displaced vertebral disc	288	327
Diabetes	223	180
Diarrhoea and enteritis	213	283
Arteriosclerotic heart disease	187	187
Psychoneuroses	167	158
Migraine	153	214
Bronchitis	136	95
All causes	123	129

The magnitude of some of the increases listed in Table 5 is also dramatic, and in terms of economics or the planning of health care in the reorganised National Health Service these increases are of considerable importance. Some of the diagnoses are unequivocally objective, and the rise in ischaemic heart disease is what one might have expected from the increased mortality from this condition. Many of the conditions listed are less precise, but they should not be dismissed as unworthy of attention on such grounds.

Where, for any condition, the index of days has risen appreciably more than that for spells, the average length of an absence has increased. Thus, although bronchitis seems to be no more frequent than it was 18 years before, the spells of absence are, on average, lasting for a longer time. What, however,

can explain more than a threefold increase in 'sprains and strains' and in 'nerves, debility and headache'? Are there really so many more injuries in Britain today despite the lack of a comparable rise in the more serious injuries such as fractures? This increase, it must be emphasised, has been restricted to injuries sustained away from work, since strains and sprains accepted for injury benefit only rose to 114 per cent over the same time.

More light can be thrown on such matters by calculating and comparing age specific rates. Thus, for strains and sprains the increase has been most marked in men between the ages of 30 and 44, and a similar pattern applies to nerves, debility and headache. Diarrhoea and enteritis, on the other hand, have increased most markedly among younger men and a group of conditions previously unrelated to age has now a most marked inverse relationship (Fig. 1). The rise in rates due to diabetes mellitus provides a contrast since this has

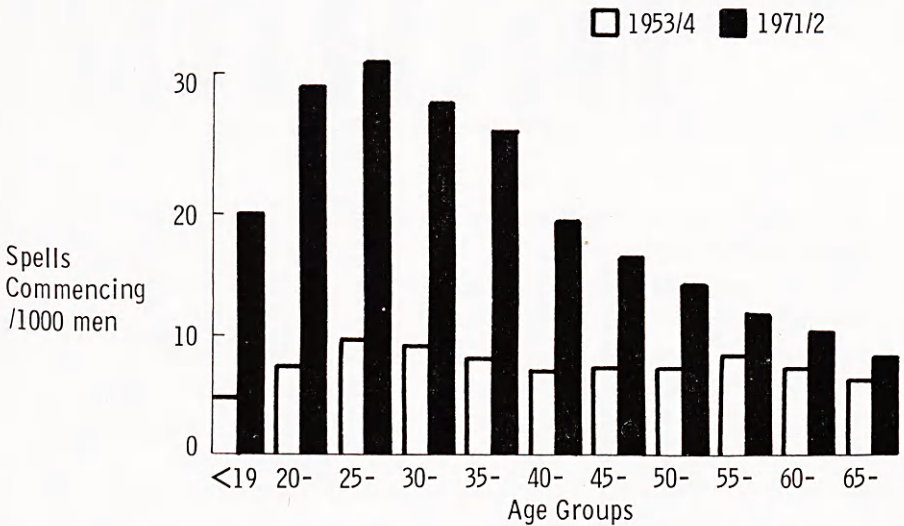


Fig. 1. Diarrhoea and enteritis. Spells of incapacity beginning in 1953/4 and 1971/2—men in Great Britain.

been largely confined to men over the age of 40 (Fig. 2). Such calculations show that the longer spells due to bronchitis already described occurred in older men and many of them are in all probability permanently disabled.

Most of the diagnoses in which substantial reductions have taken place are reasonably objective. In some, the change has been found in all age groups, as in appendicitis (Fig. 3). In others, the age distribution has changed. The reduction in spells due to gastric and duodenal ulcers has been most obvious

over the age of 40 and what had been a definitely age-related condition is now apparently much less so (Fig. 4). With an interval of almost 20 years the

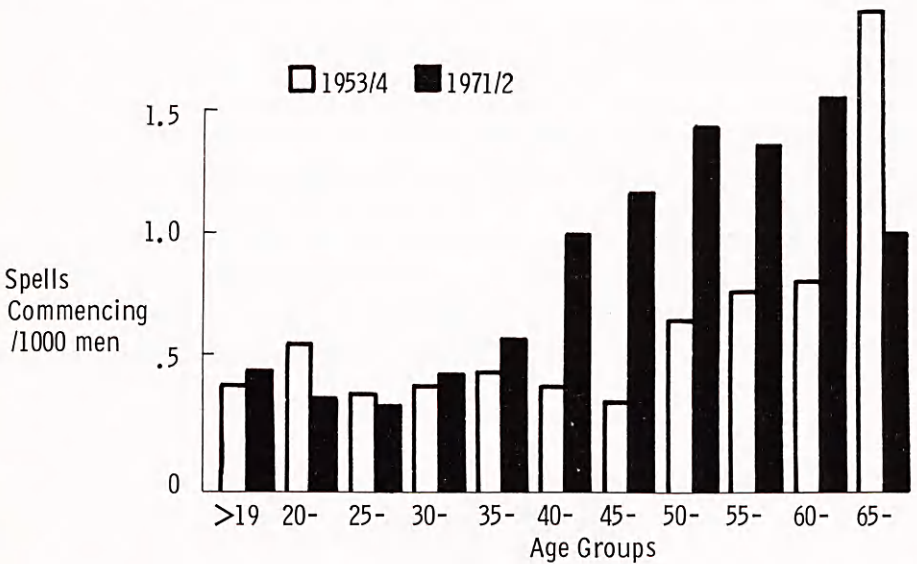


Fig. 2. Diabetes mellitus. Spells of incapacity beginning in 1953/4 and 1971/2—men in Great Britain.

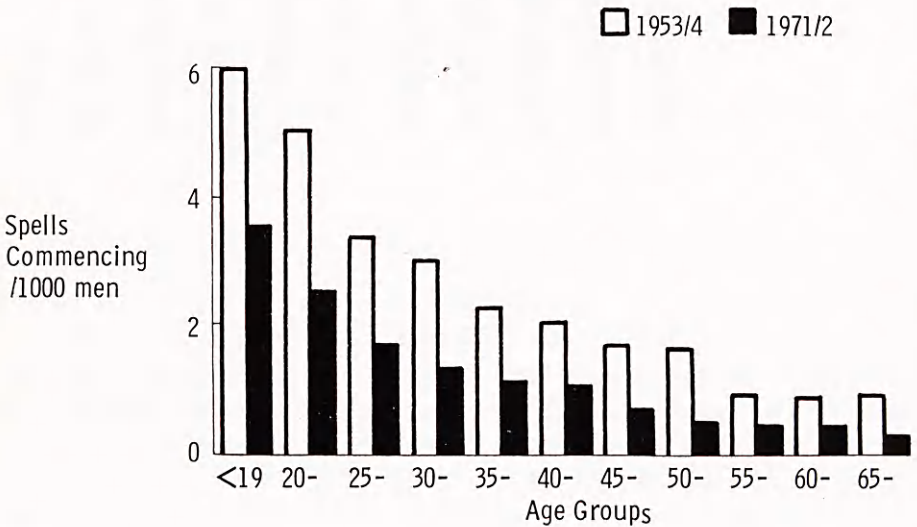


Fig. 3. Appendicitis. Spells of incapacity beginning in 1953/4 and 1971/2—men in Great Britain.



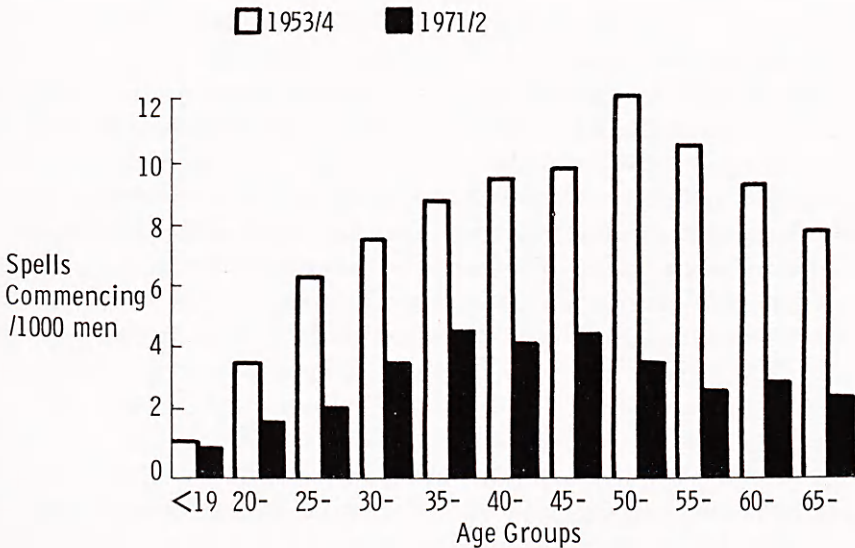


Fig. 4. Ulcers of stomach and duodenum. Spells of incapacity beginning in 1953/4 and 1971/2—men in Great Britain.

incidence of absence due to such ulcers has fallen as each age cohort has grown older, except for men under 25 in 1953–54. Improved methods of treatment cannot explain most of this and it seems more likely that the incidence has fallen. The days when to have an ulcer was almost a status symbol seem to be past. These observations merely indicate how much more we need to learn of the aetiology of such conditions, and it may be that studies of regional changes in diagnosis pattern could also provide further leads.

#### COMPARISONS WITH OTHER COUNTRIES

International comparisons of health statistics are often difficult to make but, as Doll (1973) has observed, the British record has been somewhat discouraging since 1948. Comparisons of morbidity are particularly difficult (World Health Organisation, 1968), and to be reliable require carefully designed and well co-ordinated prospective studies (White *et al.*, 1967). Absence from work attributed to incapacity may be more easy to quantify, but is powerfully influenced by many factors other than ill health. The different criteria used by social security agencies in other countries compound these problems.

One study avoided many of these issues by comparing trends within each of nine countries from a base-line in the mid-1950s (Taylor, 1969a). This showed that in all countries there had been a rise and that the rise in Britain had been relatively less than those in Sweden, Italy, Holland and West

Germany, but was similar to those in the United States and Poland. It later proved possible to attempt direct comparisons for the year 1968 (Taylor, 1972). The calculations inevitably involved various approximations but the findings estimated as calendar days per person per year showed that Holland with 21 days, Sweden with 18 and Czechoslovakia with 16, all exceeded the figure of 15 shared by Britain, West Germany and Poland. Changes in patterns of diagnosis similar to those already described were also found in other countries.

A most interesting survey of sickness rates in some multi-national companies has recently provided further supporting evidence (Jefferson, 1974). One may conclude that, although British rates are certainly higher than they used to be, they are far from being exceptionally high. In this respect at least, 'the English sickness' is not confirmed.

#### SOCIAL SECURITY AND OTHER SICK PAY

The idea that money is the only real motivator dies hard (Herzberg, 1968) and the belief that levels of sick pay and unemployment directly influence rates of sickness absence is still held by some people despite evidence to the contrary. Observations between the wars that absenteeism fell when unemployment rose have not been confirmed in the past 25 years; there is evidence that sickness absence rates are actually higher at times and in places of higher unemployment (Taylor and Pocock, 1969). For the great majority of workers in this country sickness and other social security benefits amount to a great deal less than the normal wage. When, in 1966, an earnings-related supplement was introduced payable after the second week of a period of incapacity, there were many who foretold massive rises in absence rates. Events proved them wrong, and only a handful of organisations were able to demonstrate any measurable effect, and then only in men who had received little or no additional company sick pay. There are nevertheless a minority, estimated at about 5 per cent of the working population (Trades Union Congress, 1970), whose normal wages are lower than their social security entitlements when they are sick. They are, in the main, fathers of large families, who are employed in public or local authority services (including the National Health Service), agriculture and the distributive trades. A few of these men probably do prolong their periods of sickness absence, but their number is, perhaps surprisingly, very small and quite insufficient to explain a rise in national rates.

Over two-thirds of all people employed in this country enjoy some company sick pay in addition to their social security entitlement, and many of these receive their normal wage by a make-up system while they are sick. Contrary to the belief of some managers, such company sick pay schemes have not been

shown to increase absence, except for relatively short periods after substantial increases are introduced. Several studies have shown that many groups receiving such sick pay actually take less time off for a given diagnosis than those who receive only social security benefits (Ministry of Pensions and National Insurance, 1964; Gardner *et al.*, 1968; Semmence, 1973).

The evidence thus fails to substantiate allegations that the levels of social security and other benefits given during sickness are an important cause of high rates of absence, except in a few of the lowest paid. Even when employers provide additional sick pay, and the responsibility for this does not lie with the State, there is no convincing evidence of any large scale abuse.

#### OCCUPATIONAL FACTORS

Incapacity caused by specific industrial diseases such as lead poisoning, anthrax, dermatitis and the like has fallen in recent years, and the rise in industrial injury absence has been negligible in comparison with that from injuries sustained away from work. In this restricted sense, therefore, working conditions are certainly not the cause of the rise in absence rates. There is no doubt that the working environment today is a great deal safer than it used to be and this is to be expected from the activities of managers and unions as well as those of safety engineers, factory inspectors, occupational health physicians and hygienists, ergonomists and so on. Although there are still serious problems, there now exists the knowledge of how to control or eradicate most of the traditional industrial diseases.

I believe, however, that we must take a much broader view of the hazards of work. This would involve including not merely physical, chemical and biological hazards, but additionally those related to the organisation and methods of work (overtime, shift work, paced work on production lines and so on), and also those risks to health arising from the psycho-social working environment (quality of supervision, industrial disputes, work group size and job satisfaction). These areas have been largely neglected by doctors, but can nevertheless be found to provide some explanations for the rising trends in sickness absence. Their nature requires that they be studied by an inter-disciplinary approach and doctors have been somewhat reluctant to partake in this method.

As all who have attempted field studies in industry will know, a factory in full production does not easily lend itself to the experimental method. Many proposals to study controlled changes in working arrangements have been abandoned because neither management nor employees were prepared to disturb work methods and payment systems. Hospital staff have been no exception. Field students must therefore make the best use of information

already available and cause as little disturbance as possible if the necessary agreement and co-operation is to be secured. Reproducing factory conditions in the laboratory may be practicable, if expensive, at the mechanical level. But volunteers acting as operators under controlled conditions behave in a very different way from workers in real factories; the psycho-social environment is, after all, utterly different.

Long hours of work and their effects upon health provide an example of this and, surprising as it may seem, hardly any relevant information exists applicable to present-day problems. The pioneer work of Mather (1894) on the beneficial effects to both health and productivity of reducing the working week from 54 to 48 hours, and the studies of Vernon (Health of Munition Workers Committee, 1918) which demonstrated a rise in both accidents and sickness when compulsory working hours exceeded 60, still stand unchallenged today. Now that a 40-hour week has become general, there are many who consider that high levels of overtime cause extra absence attributed to sickness, whether genuine or feigned. Lokander (1962) failed to confirm this and I, too, searched for a correlation with no success. The explanation is that some men who do little overtime are already unfit and those that do the most (20 to 30 hours each week) are determined to earn as much as possible and do not go off sick.

The length of a working day is sometimes substantially extended by commuting time, particularly for those in London. Two thousand office workers in Central London provided details of their journeys and the results were analysed with their absence records (Taylor and Pocock, 1972a). The complexity of the daily journey as measured by the number of stages (bus, train, walk, etc.) was the most significant factor to emerge; those with four or more stages had 20 per cent more time off than those with less. The time taken was of less importance and the distance mattered least. The attack rate of influenza during the A<sub>2</sub> Hong Kong epidemic was no higher among those who used public transport.

Shift work, too, has been alleged to cause ill health and the numbers employed on shift have doubled in the past decade. The matter has been reviewed in this Journal (Taylor, 1969b) and a more recent 13-year cohort study of mortality (Taylor and Pocock, 1972b) and a matched pair comparison of day and shift workers' absence patterns over two years (Taylor *et al.*, 1972) showed that such allegations could not be confirmed and that in all forms of absence shift workers had the better experience. Some arrangements involve regular 12-hour work periods and others sometimes involve 16-hour shifts; these should be properly investigated, but the limited evidence available has not yet shown any effects upon health.

With a few exceptions, the employment of large numbers on moving production lines scheduled (literally) to the second, has been a post-war development. Motor car assembly line workers are among the highest paid of all blue collar workers, but as they age there are many who cannot keep up the pace. The decision to opt out can be agonising as it almost certainly involves a substantial reduction in earnings and is often prefaced by a period of anxiety and somatic symptoms. It seems remarkable that virtually no research on these problems has been published in the English language in the past 20 years. No facts are therefore available to allow conclusions on the possibility of any relationship between this type of work and rising rates of sickness absence. It is relevant to note that both Volvo and Philips have made changes in some parts of their factories, back to a system where groups of workers complete a task in their own time, and among the benefits claimed are reductions in absence rates of those concerned.

The quality of management, particularly that of supervisors, has been shown to influence absence behaviour, particularly in respect of brief spells (Argyll *et al.*, 1958); and these levels of staff have certainly been adversely affected by inflation and by increased militancy on the shop floor. Bad industrial relations may be manifest not only by strikes or other collective action, but when matters are building up there is some evidence that sickness rates also rise. When a strike is settled the rates usually fall below the normal level for several weeks, and this cannot wholly be explained by a need to earn more.

The size of work groups is well known to affect absence rates (Revans, 1960) and all studies agree that small groups have the lowest rates. The emphasis in industry in recent years has apparently been based on the belief in 'the economy of scale'. Amalgamations, take-overs and straightforward growth have dominated manufacturing and service industries, and to this the National Health Service is no exception. Sickness absence rates in nursing and ancillary staff in hospitals are now so high as to affect patient care. One interesting study showed that nurses in training who were repeatedly moved from one ward to another had higher rates of sickness and were also more likely to resign (Bendall, 1965).

#### JOB SATISFACTION

Job satisfaction is certainly one of the most important occupational factors related to sickness absence. To academic psychologists, job satisfaction is an imprecise concept since it is the result of several different and more specific attitudes. These include a man's attitude to the actual work and the importance he places upon it, the way he is allowed to carry it out and also the nature of the place in which he does it. Even so, there is no doubt of the importance

of all this since job satisfaction strongly influences motivation when a decision is made whether or not to take time off work due to ill health (Hinkle *et al.*, 1961; Taylor, 1968; Ferguson, 1972).

Much has been written, particularly by management consultants, on the ideal characteristics of a job. Despite differences in detail, these usually agree on a number of features—

- (a) The status, wage and conditions of service must be accepted as adequate.
- (b) The job should provide some element of personal challenge and also an opportunity to develop skills, and perhaps lead to promotion.
- (c) The individual should know not only what his job is but also be told how well he is performing.
- (d) He should be allowed to take decisions of some sort and should understand when and from whom he can seek help.
- (e) He should clearly understand how his job fits in with those of others, and there should be some desirable end product.

While one would hope that most physicians and others in jobs of high socio-economic status probably do have jobs which incorporate these features, there are millions who do not. The expression 'job satisfaction' over-simplifies the complex relationship between a man and his job, for he may be content with some aspects yet dissatisfied with others. One question on this was asked in the first year of the General Household Survey of the 8,000 men who currently held a job. The results showed that 42 per cent were 'very satisfied', 43 per cent 'fairly satisfied', and 7 per cent were neither satisfied nor dissatisfied. The high satisfaction rate as an answer to one such question has been noted before since most people are reluctant to admit to a stranger that they are in the wrong job. The absence experience of these men was then compared (Table 6), and the dissatisfied were found to have almost half as many more days off sick in the year as those in the first two groups.

Job satisfaction, however, involves not merely the characteristics of jobs, but also those of individuals. In this context one is concerned not so much with

TABLE 6. Job satisfaction and absence from work due to illness or injury 1971 (from General Household Survey, 1973)

Degree of job satisfaction	Per cent absent in a two week period	Average work days lost per man per year
Very or fairly satisfied	4.7	7.8
Neutral	6.0	8.4
Rather or very dissatisfied	6.9	11.2
Total	5.0	8.1

traditional measures of personality but more with the way in which people view their life, their personal philosophy. A study of four groups of workers with frequent spells of absence, long spells, no spells at all and a control group, showed marked differences in this respect (Taylor, 1968). The 'never sick' group were of particular interest since they avoided contact with doctors (and dentists) as far as possible. They were, however, not as healthy as their records would have suggested, since a quarter of the group had physical signs of chronic conditions varying from asthma and diabetes to kyphoscoliosis and unrepaired hernias. They were seldom or never late for work, claimed to enjoy their jobs and did not seek promotion. They maintained that their childhood had been very happy (despite objective evidence to the contrary) and preferred to cycle to work rather than use their cars. Another approach on a larger scale by Turner and Lawrence (1965) showed that men whose attitude to life was what has been described by Max Weber as the 'Protestant ethic' had much lower rates of absence than those who did not take this view. The Protestant ethic includes values often described in Britain as 'Victorian', such as the inherent merit of hard work and doing a job well, the urge to get on in life and do the best for one's family, and so on. Most people would agree that such a scale of values is less prevalent in our society today, but this change is not confined to Britain, or indeed to the western world.

Lack of job satisfaction then is due to a combination of occupational and personal characteristics. It may not of itself actually cause ill health, but can certainly reduce a man's motivation to go out to work on a cold and rainy day when he also happens to have a minor indisposition. This raises the question of the criteria that are applied when a medical certificate is issued.

#### MEDICAL CERTIFICATION

It is almost inevitable that payment of public money for periods of incapacity for work should involve medical confirmation by means of a certificate. Insurance companies and other private organisations, including trades unions and friendly societies, all have similar requirements, and this is a world-wide situation. Many doctors dislike the duty of certification imposed on them by their terms of service under the National Health Service and it is the declared policy of the British Medical Association to press for abolition; this outcome seems unlikely in the extreme but in the event there would also be a reduction in remuneration from the State. It is argued that National Insurance certification damages the doctor-patient relationship, but the provision of private certificates at the request of the patient apparently does not. Doctors in the hospital service are seldom involved since certificates for in-patients are signed by others. The whole matter arouses strong and sometimes irrational

emotions in some doctors, and also in some managers who accuse them of irresponsible and permissive behaviour.

Several studies have shown that consultations solely for the purposes of certification form an appreciable part of a general practitioner's workload (Carne, 1969), but as far as I can ascertain, no medical student in this country is told anything about the criteria for assessing fitness for work and most never see a certificate until they qualify. The wording of the National Insurance certificate (Form Med. 3) states: 'I certify that I examined you today/yesterday and that in my opinion . . . you were incapable of work at the time of the examination by reason of. . .'. The proportion of people covered by such a certificate whose incapacity is manifestly complete, is very small indeed. As in many other human issues there is a vast grey area, and this is compounded by the statutory requirement that a worker is either fit or unfit. A scientific evaluation of fitness would require the full facilities of an experimental physiology laboratory, and even then the findings would have to be matched against a set of similarly measured physical demands of the particular job. With a few exceptions most doctors have little knowledge of their patients' jobs and the extent to which they can be modified. The result is that in all but the most clear-cut of cases the patient's view must prevail. This source of information is scarcely impartial; both the work-addicted and the workshy will influence the doctor's decision to sign. But, even in the abstract, doctors disagree on how long a worker should stay off after a herniorraphy (Moss *et al.*, 1957).

The time has come to admit quite openly that medical certificates are now, for all practical purposes, issued on demand. The few who resist soon tire and there are those who will only argue about a certificate once a day. In addition to the difficulties already mentioned, there is also the fear of litigation for negligence if a serious condition is missed, and a certificate for a few days is the safest course of action. The capitation system of payment also places in the patient's hand the sanction of changing his entire family to the list of a more compliant doctor and, as the B.M.A.'s evidence to the Fisher Committee explained, there have been cases of physical violence by enraged patients refused a certificate (Committee on Abuse of Social Security Benefits, 1973).

The Fisher Committee considered alternatives to certification in its present form, but felt unable to recommend any of them. It accepted that when in doubt the doctor usually gives his patient a certificate but observed that the value of certification as a control rests upon the assumption that a doctor will refuse a certificate to a malingerer. So much depends upon the veracity of the patient, but the Committee believed that many patients are more reluctant to lie to their own doctor than they may be to others, partly because they over-estimate his ability to detect deceit.



Evidence of abuse is difficult to obtain except for isolated and often anecdotal examples. The ability of some National Servicemen to obtain medical discharges for conditions which could not be confirmed by objective physical signs remains in my mind as a tribute to their determination and consistency. It is always most difficult to prove that something does not exist. Fortunately, pure malingering, or the fabrication of ill-health in a healthy person, is uncommon in industry. Most occupational physicians have come across occasional cases, and on rare occasions the National Insurance certificate may cite 'Ergophobia' or some such euphemism; another example of dubious Latin recently came my way with a diagnosis of 'Oscillans Plumbi' written by the general practitioner. The major problem is undoubtedly 'gilding the lily', exaggerating the incapacity caused by minor ailments or injuries. The issue then becomes the nice distinction between capacity or incapacity for work in the presence of an indisposition. Minor ailments are so common that the question should not be why do so many take time off, but, rather, why do most people not take sickness absence when they could do so? A survey by interview of adults of working age in South London showed no less than 95 per cent reporting some health complaint in the previous fortnight, but only 20 per cent had consulted a doctor and a mere 8 per cent had taken time off work (Wadsworth *et al.*, 1971). The explanation must often be found in the motivation to attend for work.

What are the alternatives to the present arrangements? The Dutch use a separate cadre of insurance doctors, who have no clinical responsibility, after the first two weeks of absence, which are controlled by lay inspectors. Their national rate of sickness absence is about the highest in Europe, and to reproduce the system in Britain would involve considerable extra cost in terms both of money and of medical manpower. The Swedes use formal self-declarations for the first week, coupled with surveillance by sick fund officials. Thereafter, general practitioners certify total or partial inability to work. Their sickness absence rate is also higher than ours, particularly in short spells. The Communist countries vary on points of detail but all have occupational health as an integral part of their health services. Certification of ambulant patients is the responsibility of factory doctors, and general practitioners are usually allowed to certify for a few days only. Their sickness absence rates are similar to those in Britain but may not have risen quite so steeply in recent years. Despite the advantages of certification by a doctor who knows the factory, this arrangement would not be practicable in this country since there are too few such doctors. The objection to self-certification for a few days is based on a presumption of excessive abuse. One often hears allegations that civil servants take all their 'Whitley days' but this is not true

(Thomson, 1972). In the Post Office, which operates a similar system, the proportion of staff taking their full allowance of uncertificated sick leave is less than half of 1 per cent, and in both organisations about half the men take no uncertificated absence at all.

Allowing self-certification on a national basis for absences of up to a week would probably cause an unacceptable rise in short absences unless careful and effective monitoring was also introduced, with sanctions applied rapidly to those found to be abusing the system. This would not be possible with existing staff. The Fisher Committee recommended some improvements in the Regional Medical Service of the Department of Health and in the methods of referring problem cases to it. I would also suggest that more use could be made of experienced occupational health physicians, and if the College's advice that the new Employment Medical Advisory Service should be part of the National Health Service had been accepted, the expertise of its 100 doctors could be used for the greater benefit of all.

#### SUMMARY

The cost of sickness absence to the British economy is now similar to the expenditure on the National Health Service. Rates have increased steadily, if allowance is made for influenza epidemics, and differences between regions have become more exaggerated. Certified causes have also changed a great deal since 1953, spells due to peptic ulcers, for example, have fallen by half but those from minor injuries sustained away from work have tripled. Age relationships of some conditions have also altered.

Some popular misconceptions about British sickness absence rates are discussed. They are not the highest in Europe, there is no evidence to support the view that the rise is mainly due to social security benefits, nor to environmental working conditions. Some aspects of work organisation, such as production lines and overtime, have scarcely been investigated. The relevance and meaning of job satisfaction is discussed in relation to motivation to attend for work. Doctors are widely criticised for signing certificates 'on demand'. The reasons for this are discussed, but alternative arrangements seem unlikely. More effective use could be made of occupational health physicians.

#### References

- Ager, J. E. and Raffle, P. A. B. (1973) *Patterns in Sickness Absence*. London Transport Executive.  
Argyll, M., Gardner, G. and Cioffi, F. (1958) *Human Relations*, **11**, 23.  
Ashley, D. J. B. (1968) *Human Biology*, **40**, 517.  
Bendall, E. R. D. (1965) *Nursing Times*, **61**, 760.  
Carne, S. (1969) *British Medical Journal*, **1**, 142.  
*Report of the Committee on Abuse of Social Security Benefits* (1973) (Fisher Committee). Cmnd. 5228. London:H.M.S.O.  
Doll, R. (1973) *Proceedings of the Royal Society of Medicine*, **66**, 729.

- Ferguson, D. (1972) *British Journal of Industrial Medicine*, **29**, 420.
- Gardner, M. B., Goodwill, C. J. and Bridges, P. K. (1968) *Journal of Occupational Medicine*, **10**, 114.
- Gardner, M. J., Crawford, M. D. and Morris, J. N. (1969) *British Journal of Preventive and Social Medicine*, **23**, 133.
- Health of Munition Workers Committee (1918) *Final Report*. London.
- Herzberg, F. (1968) *Work and the Nature of Man*. London: Staples Press.
- Hinkle, L. E., Plummer, N. and Whitney, L. H. (1961) *Journal of Occupational Medicine*, **3**, 417.
- Jefferson, M. (1974) *How Sick Are We?* London: Economic Research Council.
- Lokander, S. (1962) *Acta Medica Scandinavica*. Supplement No. 377.
- Long, M. W. (1968) In *Proceedings of the Symposium on Absence from Work attributed to Sickness*, p. 23. London: Society of Occupational Medicine.
- Mather, W. (1894) *The Forty Eight Hour Week*. Manchester.
- Ministry of Pensions and National Insurance (1964) *Report on an Enquiry into the Incidence of Incapacity for Work*, Part I. London: H.M.S.O.
- Ministry of Pensions and National Insurance (1965) *Report on an Enquiry into the Incidence of Incapacity for Work*, Part II. London: H.M.S.O.
- Moss, N. H., Schwegman, C. W. and Dohan, F. C. (1957) *Journal of the American Medical Association*, **165**, 322.
- Office of Health Economics (1971) *Off Sick*. London: OHE.
- Office of Population Censuses and Surveys (1973) *The General Household Survey. Introductory Report*. London: HMSO.
- Revens, R. W. (1960) in *Modern Trends in Occupational Health*. Ed. R. S. F. Schilling. London: Butterworth.
- Semmence, A. (1973) *Journal of the Society of Occupational Medicine*, **23**, 36.
- Taylor, P. J. (1968) *British Journal of Industrial Medicine*, **25**, 106.
- Taylor, P. J. (1969a) *British Medical Journal*, **3**, 370.
- Taylor, P. J. (1969b) *Journal of the Royal College of Physicians of London*, **3**, 370.
- Taylor, P. J. (1972) *Proceedings of the Royal Society of Medicine*, **65**, 577.
- Taylor, P. J. and Pocock, S. J. (1969) *Lancet*, **2**, 1120.
- Taylor, P. J. and Pocock, S. J. (1972a) *British Journal of Preventive and Social Medicine*, **26**, 165.
- Taylor, P. J. and Pocock, S. J. (1972b) *British Journal of Industrial Medicine*, **29**, 201.
- Taylor, P. J., Pocock, S. J. and Sergean, R. (1972) *British Journal of Industrial Medicine*, **29**, 208.
- Thomson, D. (1972) *Proceedings of the Royal Society of Medicine*, **65**, 572.
- Trades Union Congress (1970) *Low Pay*. London: TUC Publications.
- Turner, A. N. and Lawrence, P. R. (1965) *Industrial Jobs and the Worker*. Boston: Harvard University.
- United States Department of Health, Education and Welfare (1965) *Health Interview responses compared with medical records*. Public Health Service Reports No. 1000, Series 2, No. 7. Washington, D.C.
- Wadsworth, M., Butterfield, W. J. H. and Blaney, R. (1971) *Health and Sickness. The Choice of Treatment*. London: Tavistock.
- White, K. L., Anjelkovic, D., Pearson, R. J. C., Mabry, J. H., Ross, A. and Sagen, O. K. (1967) *New England Journal of Medicine*, **277**, 516.
- Whitehead, F. E. (1971) in *Social Trends*, No. 2. London: HMSO.
- World Health Organisation (1968) Technical Report Series 389.