

Keeping an open mind

A non-specific diagnostic nomenclature used as a tool in the management of clinical problems

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IN a significant proportion of patients seen on first contact in general practice the nature of the disease process, let alone its cause, is uncertain. This fact is used to argue the case for expanding the diagnostic nomenclature to include specific terms for these cases in order to differentiate them from those where a definite diagnosis has been made.

Using the records of an English industrial general practice to analyse retrospectively two groups of patients who were classified under the headings of (1) multiple symptoms, probably psychogenic, and (2) non-specific abdominal pain, the usefulness of adopting such a nomenclature is critically examined. The results confirm the opinion that the systematic use of such a nomenclature is of practical help in the everyday management of patients.

It is generally accepted as axiomatic in all fields of medicine that diagnosis must precede therapy and that "early diagnosis is the key to good medical practice" (Hodgkin 1963).

The difficulties begin as soon as a definition of the very term is attempted. While Stedman's *Medical dictionary* defines diagnosis as "the determination of the nature of a disease" (Stedman 1942) and Dorland's *Illustrated medical dictionary* adds to this: "The art of distinguishing one disease from another" (Dorland 1957), the *Oxford pocket dictionary* is apparently satisfied with a mere "guess at a disease" (Oxford 1947).

Koch, quoted by Braun, elaborates the aim of diagnosis as the naming of "either, the cause of the illness; or, of the pathological process; or, of a pathological manifestation; or, finally, of a certain type of personality" (Koch 1923). Some authors take the term even further and demand not only recognition of the physical illness but a "family diagnosis" which takes cognisance of "multiple inter-related health problems" affecting the family stability (Medalie 1964).

As against this supposed ideal of scientific accuracy the facts of life in the practice of medicine are somewhat different. Real patients present the doctor with symptoms and problems, but only comparatively rarely will it be possible to attach the label of a definite disease to the complaint. The frequency of achieving a firm diagnosis on first contact has been estimated in several surveys, and one suspects that differences in the results have been influenced as much by the criteria as by the material.

Eleven practitioners working with the research committee of the College of General Practitioners classed 55.5 per cent of their diagnoses as "firm" (Records Unit Working Party 1958); Crombie, in differentiating between firm, eliminating, tentative, and no diagnoses, gave himself a score of 44.4 per cent firm diagnoses in a series of 304 new complaints (Crombie 1963). Hodgkin, in his seven-year practice analysis, classifies his diagnoses as either "suspected" or "confirmed", and for the ten most common conditions arrives at a combined total incidence rate of 407.2 confirmed diagnoses per 1,000 patients per annum, compared with a suspected rate for the same conditions of 1,102.4 (Hodgkin 1963). Bain and Spaulding (1967), in their study and classification of the

presenting symptomatology of 4,000 consecutive patients attending a large medical out-patients clinic, and reassessing them after appropriate investigation according to broad diagnostic groups found that in a large proportion no definite explanation of the symptom had been arrived at. In patients complaining of (1) abdominal pain and (2) dizziness they classified 15 and 16 per cent respectively as being due to "undetermined" causes.

Lest it be thought that the low rate of diagnostic accuracy is specific to general practice Crombie noted that of 52 consecutive patients referred for a consultant opinion his own diagnosis was confirmed in 30, but even after full investigation a mere eight of his 21 "problem cases" could be reclassified as "firm" diagnoses (Crombie 1963). In a small personal series of 30 consecutive patients referred for diagnosis nine remained undiagnosed after specialist investigation (Reichenfeld 1963). Brandt felt that in 15 out of 93 referred cases specialist opinion had been of little help for either diagnosis or therapy (Braun *et al* 1964).

It is against this background that the often futile quest for accurate and early diagnosis must be seen. Hodgkin, by classifying his diagnostic results as either "confirmed" or "suspected" inevitably leaves his unconfirmed results somewhat in the air: He merely indicates what a complaint might have been, rather than what it is. Goldberger, in developing an holistic method of approach towards classifying patients is getting away altogether from the concept of specific diseases—"there are no diseases; there are only patients"—and advocates a classification which is based on host-object interactions. He defines diagnosis "as a term which refers to methods used by physicians to differentiate a group of patients showing certain clinical signs from other groups of patients" (Goldberger 1965).

From the point of view of the patient who is, after all, the sole *raison d'être* of physicians and of all their efforts, what matters is whether the doctor appears to be able to do something for his complaint. Trotter recognized this long ago:

"The ordinary patient goes to his doctor because he is in pain or some other discomfort and wants to be comfortable again. I speak of keeping the patient comfortable in the broadest possible sense to include matters of the mind as well as the body. . . . In the exercise of this art [of keeping the patient comfortable] he will have to convince the patient of his interest in the case, he will have to let him feel that something significant is being done all the time. . . . To the deep unreason with which all patients approach the medicine man, his interest is more potent than knowledge and skill, the latest development in science, or the utmost virtuosity in art." (Trotter 1938).

One would therefore agree with Cohen that the main purpose of diagnosis is to provide "a provisional formula designed for action" (Cohen 1943). It is for this reason that the diagnostic label which one attaches to a patient should give some indication in which direction further action could be expected, and should delineate a particular patient from other groups of patients where a different line of approach would be appropriate.

For example if we are confronted with a patient who is complaining of lack of energy, loss of weight and cough, the action the doctor is going to take will be aimed in one direction if he finds sugar in the urine, but in a different direction if the chest x-ray shows mottling at the left apex and tubercle bacilli are found in the sputum. While the respective diagnosis of diabetes on the one hand and pulmonary tuberculosis on the other will still not give a complete picture of the patient it will conjure up a sufficiently clear mental image to be of practical use in helping one to decide on the next steps in the management.

Supposing, however, that the above-mentioned as well as other investigations prove negative, and that, none the less, the patient gradually improves, starts gaining weight and stops coughing, we are faced with a situation where no diagnosis has been and ever will be made. We are left with a group of symptoms which have not been accounted for and cannot be classified under a label which implies an understanding of the underlying disease process. As was pointed out by Braun, this fundamental difference should be reflected in the nosology: "One should only speak of diagnosis when there has been a

scientifically convincing explanation of the complaint. All other diagnostic results must be recognized as mere classifications of typical clinical conditions and pictures" (Braun 1961). Based on seven years of practice analysis he has been led to extend the *International Classification of Diseases* by giving specific labels to every complaint seen and, even on first contact, differentiated in some recognizable way, from all other complaints. By thus insisting on giving a label to what he calls the "smallest recognizable diagnostic unit" Braun (1957) refuses to lump together under the headings (1) "other recognized disease", or (2) "other symptoms, signs or incompletely diagnosed diseases", included in the *ICD* and accepted by the Records Unit of the Royal College of General Practitioners (1963), a miscellaneous group of complaints which merely have in common the lack of identification with definitely recognizable disease processes.

On the other hand he groups together under one heading different complaints where experience has shown that accurate differentiation is frequently not even possible in specific research projects and certainly not a practical proposition in everyday practice. As an example, where the College classification enumerates as separate diagnostic entities: (1) Adenovirus infection; (2) pyrexia without rash; (3) febrile common cold and influenza-like illness; (4) influenza; (5) pyrexia of unknown origin, Braun merely registers "pyrexia". Braun's avowed purpose in modifying the *ICD* was to enable him to collect reliable morbidity statistics from his own practice which he could then compare with those collected by different authors. However, a nomenclature which differentiates between specific diseases and pathological processes on the one hand, and non-specific syndromes and symptom complexes on the other, suggested that it might constitute a potentially useful tool in general practice, encouraging more purposeful diagnostic efforts on the one hand, while serving as a constant warning against using too readily firm diagnostic labels on insufficient evidence.

The purpose of the present study is to evaluate whether the systematic use of Braun's nomenclature was, indeed, of practical use in the everyday management of patients seen in general practice.

Method

The records of a single-handed industrial practice in Birmingham, England, were utilized. Some individual charts went back to 1941, data accumulated after 1956 represented for the most part notes collected by the author. Systematic registration of all diagnostic results was started in October 1964 and continued until April 1966.

The Practice Index (Walford 1963) was employed, its main advantages over more elaborate methods of data collection being (1) simplicity and (2) ease of retrospective correction.

Two widely differing groups of complaints were chosen for analysis:

- (1) Multiple symptoms, probably psychogenic; and
- (2) Non-specific abdominal pain.

Multiple symptoms, probably psychogenic

Braun includes under this label complaints where purely aetiological, morphological, or functional components have not been clearly implicated and where at the same time a formal psychiatric diagnosis has not been established. They would fit into the broad category of "personality type" suggested by Koch (1923), and correspond largely to what Balint has designated a Class II pathological condition. "... there are people who have no localizable illness, but are 'ill' themselves. The most exact scientific examination cannot identify in them any localizable fault"; (Balint 1969). Yet the very indefiniteness of the label indicates that the door is still left open toward a more formal diagnosis in the classical sense, depending on the progress of the case and on the outcome of further investigations which at the time of first contact have not yet been decided upon.

In the present series 56 cases were included under this heading, and table I demonstrates that they constitute approximately 18 per cent of those cases where a psychogenic mechanism has been suspected. Figure 1 demonstrates that approximately 66 per cent of these patients were over 40 years of age and that 71 per cent were female. Figure 2 shows that while 18 patients consulted the doctor with a new complaint during the period under review, no fewer than 31 had been 'sick' for over a year, and 22 of these had had symptoms for six years or more.

Whilst Balint has advanced the view that in patients suffering from a class II pathological condition "any attempt at a traditional diagnosis is either futile, or the diagnosis refers only to an irrelevant or a temporary condition" (Balint 1969), Braun, by this very nomenclature, continually keeps the physician on guard against the danger of falling into the common pitfall of regarding every symptom presented by these patients as a further manifestation of their maladjusted personalities. It is precisely in this group of patients that the risk of missing a serious organic condition—what Braun has defined as a 'potentially dangerous reversible pathological process'—is maximal.

Study of the charts showed that this heterogeneous group of patients could be sub-divided along several parameters:

(1) Multiple symptoms masking co-existing serious—and treatable—organic conditions ..	5
(2) External stress situations that had not been successfully dealt with	4
(3) Anxiety state—precipitating events not elicited	11
(4) Disturbed family relationship	10
(5) Inadequate personality	2
(6) 'Passport to doctor'	2
(7) No other relevant information elicited	22
TOTAL	56

More detailed breakdown of some of these subgroups is demonstrated in tables II, III and IV.

Two presenting symptoms stand out as occurring comparatively frequently: (1) dizziness—reported variously as 'giddiness', 'dizziness', and 'pitching forward' (12 cases—21.5 per cent), and (2) recurrent abdominal pain (12 cases—21.5 per cent). These findings correlate with those of Bain and Spaulding (1967) who classified a psychiatric or undetermined aetiology in 56 per cent of patients presenting with dizziness and in 43 per cent of those presenting with abdominal pain.

It should be pointed out that although significant data indicating likely psychological mechanisms responsible for the production of symptoms were available in many of these patients, no systematic attempt was made at the time to use this knowledge therapeutically. It is therefore hardly surprising that alleviation of symptoms did not

TABLE I
PSYCHIATRIC COMPLAINTS—TOTAL INCIDENCE

	No.	Per cent
Mental retardation ..	2	0.64
Organic brain syndrome ..	2	0.64
Schizophrenia	8	2.57
Manic depression, circulars depressed ..	12	3.85
Anxiety neurosis	72	23.15
Obsessive compulsive neurosis	5	1.60
Depressive neurosis ..	40	12.86
Neurasthenic neurosis ..	31	9.97
Traumatic neurosis ..	1	0.32
Antisocial personality ..	3	0.96
Inadequate personality ..	7	2.25
Alcoholism	1	0.32
Drug dependence	1	0.32
Tic	3	0.96
Sleep disorders	9	2.89
Cephalalgia	18	5.79
Migraine	12	3.86
Adjustment reaction to adolescence	4	1.29
Adjustment reaction to old age	5	1.61
Marital maladjustment ..	16	5.14
Social maladjustment ..	3	0.96
Multiple symptoms, probably psychogenic ..	56	18.00
TOTAL	311	99.95

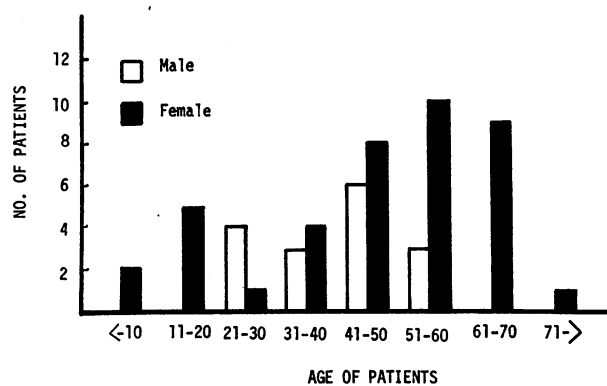


Figure 1

Multiple symptoms, probably psychogenic—age and sex distribution

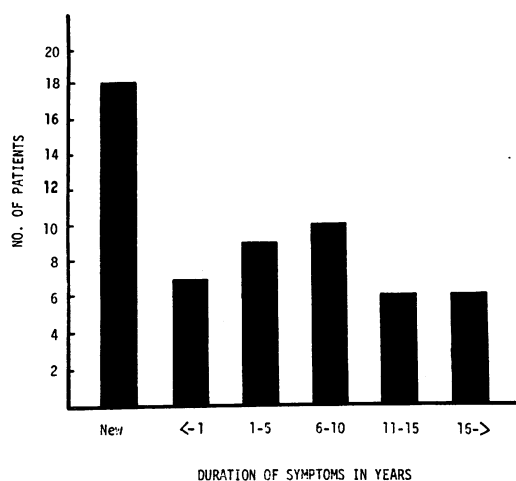


Figure 2

Multiple symptoms, probably psychogenic—duration of symptoms

TABLE II
MULTIPLE SYMPTOMS MASKING CO-EXISTING ORGANIC CONDITIONS

Age	Sex	Symptoms	Duration	Organic diagnosis
58	F	Pitching forward	15 years	Cerebellar ataxia; carpal tunnel syndrome
50	M	Bizzare Feeling half dead	9 years 2 days	Acute purulent bronchitis
55	F	Listless Disagreements at work Vomiting, pain right lumbar region	5 months 2 months 3 days	Hydronephrosis in remaining kidney due to kinking of ureter implanted in colon for ectopic bladder 15 years previously
69	F	Multiple; chronic depression	15 years	Carcinoma of lung
9	F	Recurrent abdominal pain, vomiting; school anxiety	9 months	Gangrenous appendix

differ markedly in this group compared with those patients where this information was not available.

Review of these cases, has, however, indicated clear pointers towards more appropriate and purposeful diagnostic investigation and therapeutic intervention. They

TABLE III
EXTERNAL STRESS SITUATIONS INADEQUATELY DEALT WITH

<i>Age</i>	<i>Sex</i>	<i>Symptoms</i>	<i>Duration</i>	<i>Stress factors</i>
52	M	Abdominal pain	1 year	Death of mother
		Pitching forward	1 year	
34	F	Trembling sensation in lower spine	1 year	Death of mother
46	F	Intermittent giddiness	12 years	Multiple social demands: visitors, wedding, church fete
		Pitching forward	6 months	
64	F	Sensation of falling forward	5 months	Start of journey
		Sensation of swelling up	2 days	

TABLE IV
DISTURBED FAMILY RELATIONSHIP

<i>Age</i>	<i>Sex</i>	<i>Symptoms</i>	<i>Duration</i>	<i>Position in family</i>	<i>Family pathology</i>
36	F	Pain in chest; insomnia; headache	Several years	Mother	Grossly inadequate; permanently on welfare
20	M	Blurring of vision	2 months	Oldest son	Isolated over-ambitious father; schizoid mother
15	M	Dizziness	2 weeks	Younger son	Grossly inadequate
22	M	Run down; palpitations	1 year	Older son	
53	F	Pain in chest; headaches	6 years	Mother	Inadequate
36	F	Shaking inside	2 months	Mother	Broken home
44	F	Multiple	7 years	Mother	Divided
48	F	Feeling of pressure; loss of balance	1 month	Mother	Isolated ambitious father
52	F	Recurrent abdominal pain; migraine	7 years	Mother	Marital maladjustment; Pathological tie to daughter
33	F	Abdominal pain	3 weeks	Mother	Marriage à trois

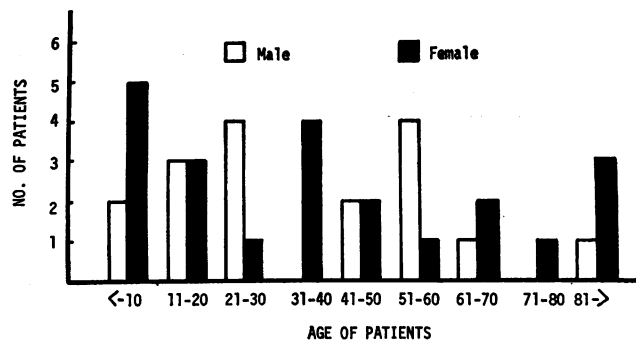


Figure 3

Non-specific abdominal pain—age and sex distribution

could be summed up thus:

1. Do not ignore the possibility of a serious organic condition developing just because the patients or the way they describe their symptoms are somewhat odd.
2. Find out about stress in their life situations.
3. Find out about generalized anxiety.
4. Assess the level of general psychosexual maturity.
5. Get a picture of the way the family is functioning as a unit and specifically in relation to the identified patient.
6. Assess the patient's feelings towards the doctor and vice versa.

Non-specific abdominal pain

Following Braun, this label was used in afebrile patients whose presenting symptom was unaccompanied by definite localizing signs. As seen from table V, 39 cases were thus delineated from all other patients with abdominal symptoms where either a definite disease process had been identified or where symptoms other than pain were the predominant feature. Figure 3 demonstrates that all age groups and both sexes were fairly evenly represented and, as is evident from figure 4, most of these patients presented the picture of an illness of acute onset, symptoms having been present less than one week in 30 and in seven of these for under 24 hours. Retrospective study of the charts made it possible to identify a number of sub-

TABLE V

ABDOMINAL COMPLAINTS—TOTAL INCIDENCE

	No.	Per cent
Carcinoma of colon ..	1	0.52
Gastric ulcer ..	2	1.05
Duodenal ulcer ..	14	7.32
Peptic ulcer type dyspepsia	17	8.82
Appendicitis ..	3	1.57
Hiatus hernia ..	3	1.57
Cholecystitis ..	1	0.52
Diverticulitis ..	2	1.05
Regional ileitis ..	1	0.52
Ulcerative colitis ..	2	1.05
Haemorrhoids ..	20	10.47
Fissure in ano ..	5	2.62
Constipation ..	10	5.23
Diarrhoea ..	43	22.51
Vomiting ..	18	9.42
Nausea ..	4	2.09
Haematemesis ..	2	1.05
Melaena ..	2	1.05
Rectal bleeding ..	2	1.05
Non-specific abdominal pain ..	39	20.42
TOTAL ..	191	99.90

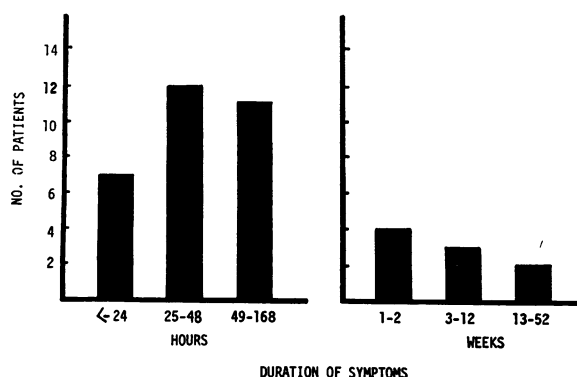


Figure 4

Non-specific abdominal pain—duration of symptoms

- (1) Short history of abdominal pain with some evidence of constitutional or local disturbance. It was in this group that the largest proportions, ie, six, eventually developed unequivocal signs of a definite disease process. The final diagnoses were: Infected mucocoele of appendix, carcinomatosis, obstructive jaundice, acute pancreatitis, infectious hepatitis, chronic mal-absorption syndrome.
- (2) Short history of abdominal pain with no evidence of constitutional or local disturbance. Eighteen of these settled down without a definite diagnosis, the final classification in the

- remaining four being acute anxiety state in two, and one each of nephrolithiasis and hysterical reaction in a chronic schizophrenic. 22
- (3) Recurrent attacks of abdominal pain associated with specific non-abdominal disease. This group included two cases of coronary artery disease and one each of hemiplegia and chronic bronchitis with emphysema. 4

Discussion

The immediate effect of systematically adopting a classification which allowed different levels of diagnostic accuracy and specificity was to encourage a more critical approach towards one's diagnostic efforts. By the mere existence of a terminology which made it clear that certain cases had not been satisfactorily understood one was almost driven to more intensive and frequently more economic, purposeful, and successful investigations. As a result some patients who had for years been 'diagnosed' as 'neurotics', 'functional dyspepsia', 'gastritis', 'rheumatism', and so forth, had their organic complaints satisfactorily identified or were helped to reveal longstanding obsessional neuroses and emotional difficulties. In addition, the classification made it possible to adopt a positive expectant attitude in several cases, being made aware by the yellow warning light of a non-specific nosology of the possibility of falling into what Hodgkin has called 'misleading pitfalls' or missing what Braun has defined as 'potentially dangerous preventable processes' (abwendbar gefährliche Verläufe).

The present retrospective analysis has also been useful in throwing the spotlight on a group of patients where diagnostic efforts had been inadequate and indicated possible ways of improving the diagnostic routine for particular groups of patients.

A diagnostic nomenclature, to be of practical use must present the physician with the means to differentiate a group of patients showing certain clinical signs from all other groups of patient. It must guard him against missing potentially dangerous preventable processes. It must provide a provisional formula designed for action, and it must not lead him towards wasteful and fruitless investigations.

The present investigation has shown that a classification which differentiates between definitely understood disease processes and undiagnosed symptoms and symptom complexes fulfils these criteria.

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