

## The Couvade Syndrome

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Pregnancy in their wives is known to precipitate mental illness in some husbands (Zilboorg, 1931; Freeman, 1951; Towne and Afterman, 1955). But the fact that it may more commonly cause physical symptoms seems never to have been fully investigated, and has only occasionally been reported in the medical press.

Despite this, there are some interesting historical records. One fairly widespread belief is that expectant fathers are particularly liable to toothache. This is mentioned in "Westward Ho" a play by the Elizabethan dramatists Dekker and Webster (1607) and has been recorded from East Anglia (*Encyclopædia Britannica*, 1959) and among the miners of Fife (Rolleston, 1945).

There are also records of a belief that midwives and witches were able to transfer labour pains to expectant fathers (Pennant, 1772; Murray, 1921). At least one witch is said to have been burned in Scotland on this account (Frazer, 1910).

According to Hunter and Macalpine (1963) symptoms in husbands during their wives' pregnancies were known to Bacon, and also to Robert Plot, who in 1677 found it strange "that the pangs of the woman in the exclusion of the child . . . sometimes affected the abdomen of the husband".

A transient abdominal upset in soldiers about the time when their wives were believed to be in labour was familiar to medical officers during World War II. Among them the phenomenon was sometimes referred to as the couvade, a name which more properly describes a ritual pretence of childbirth common to many primitive societies. Under active service conditions separation of husband and wife and lack of news were thought to be operative factors. This is probably incorrect, for the condition is common enough in civilian life and the number of men who report nausea, vomiting

and cramps, sleeplessness and irritability during their wives' pregnancies is surprising (Wessel, 1963).

The only long series of cases published so far is by Curtis (1955), who observed the occurrence of gastro-intestinal symptoms in 22 of 55 expectant fathers. Several men developed "morning sickness" and less often a sudden increase in appetite. Anorexia, nausea and epigastric discomfort were common; also alternating constipation and diarrhoea; headache, dizziness and various hypochondriacal complaints. Curtis stressed that the subjects were seldom aware that their symptoms bore a relationship to approaching parenthood. This study is open to criticism in that it was uncontrolled; the more so because all the recorded symptoms are common ones and may be due to a multiplicity of causes, some of which are clearly not of psychological origin.

The remaining medical reports consist either of passing references (Jones, 1942; "Any Questions", 1952) or reports of isolated cases (Jacobs, 1943; Evans, 1951; Moore, 1952). Two of Freeman's 6 patients who developed mental symptoms in relation to their wives' pregnancies also suffered abdominal pain, one having his appendix removed on this account (Freeman, 1951).

The purpose of this paper is to show how commonly expectant fathers are affected by their wives' pregnancies and in what way. Consideration is given to some of the mechanisms which may underlie the production of symptoms and to the relationship of the syndrome to the ritual couvade.

### THE RITUAL COUVADE

The term couvade is derived from the French verb "couver" (to brood or hatch). It is applied to an interesting ritual which has been practised

by many different races in widely separate areas throughout the world. The ritual is of great antiquity and was, for example, observed by Diodorus Siculus in 60 B.C. (Licht, 1935).

While subject to local variations, the couvade occurs in two main forms. The pseudo-maternal couvade consists, in essence, of the father-to-be, at or about the time of his wife's confinement, retiring to bed, simulating child-birth and receiving the attention usually shown to parturient women (Frazer, 1910). The dietetic couvade consists of the observance of dietary restrictions by the father during the postnatal period, sometimes also of abstinence from hunting. This is directed not at the mother but at the child, and appears to be derived from the idea that a peculiarly intimate relationship exists such that the child is affected by the father's activities (Westermarck, 1921).

Many explanations have been given of these curious customs, some of which are patently absurd (Dawson, 1929). A more rational view was that of Tylor (1889) who saw the couvade as an adoption ceremony marking, in certain tribes, the transition from matrilineal to patrilineal descent or ensuring the child's legitimacy.

This explanation is not entirely satisfactory. Today the more generally accepted anthropological view is that the couvade is one of many examples of sympathetic magic (Malinowski, 1937). Sympathetic magic governs numerous superstitions; for example, the transference of evil (Frazer, 1910), the idea of which largely accounted for the witchcraft delusion. Related to this is the notion of omnipotence of thought, (Piaget, 1930) a form of paleologic common to children, schizophrenics and primitive people in which the necessary antecedent of any event is believed to be an act of will (Arieti, 1959).

In the light of this it is interesting to observe a number of equally curious but obviously related customs. These commonly express the notion of vicarious suffering applied for the relief of women in labour at the expense of their husbands. For example: it has been recorded from some countries that it was customary for a parturient woman's husband to dress himself in some of her clothes. Alternatively a woman in labour might don her husband's vest, even his

trousers, or lie upon his clothes when in childbed (Crawley, 1927).

Reik (1931) appears to have been the first to offer a psychodynamic interpretation of the couvade. In essence, his view was that the pseudo-maternal couvade is the outcome of ambivalence in the relationship between man and wife. As both hostile and tender emotions exist side by side and the wife in childbed is felt to be in danger, the husband acts out her confinement in an effort to protect her, seemingly from evil influences but in reality from his own buried feelings of hostility. Reik also invoked ambivalence as the main explanation of the dietetic couvade; ambivalence directed not on this occasion towards the mother but at the child. Once again the father's behaviour can be construed as an effort to protect the child against his hostile feelings. However, while some emotionally immature fathers do experience conflict following the birth of their children, whom they may regard as rivals for dependence, no precise neurotic analogy to the dietetic couvade appears to exist. In contrast there is ample evidence to suggest that certain neurotic symptoms stand in parallel relationship to the pseudo-maternal couvade.

#### THE COUVADE SYNDROME

This may be defined as a state in which physical symptoms of various kinds occur in the husbands of pregnant women, and are of psychogenic origin and connected in some way with pregnancy. The symptoms tend to occur for the first time about the third month of pregnancy, although they may appear at any time from then on and in a number of cases just before labour begins. They disappear when the child is born. The most likely immediate cause of the syndrome is anxiety about the possible dangers of childbirth, though the response to this anxiety varies, as do its deeper determinants. The couvade syndrome may be regarded as psychiatrically analogous to the ritual couvade inasmuch as there are certain factors common to both phenomena.

While it is chiefly husbands who are affected, other male relatives suffer occasionally (Freeman, 1951). There are two reports of a

similar occurrence in children (Dally and Mullins, 1954; Clyne, 1964). We have also received a verbal account of a midwife who had to change her occupation because attendance at confinements seemed to cause her to suffer attacks of abdominal colic.

Despite the chronological relationship of pregnancy to the occurrence of symptoms, the link between these events may not be perceived by the sufferer. The symptoms which occur tend, though not invariably, to stand in symbolic relationship to the precipitating cause, and thus most often take the form of a functional disorder of the alimentary tract. Occasionally certain pregnancy symptoms are mimicked in a manner which is quite remarkable.

#### Case 1

A 26-year-old Australian soldier was admitted, while on active service, to a military hospital with a swollen abdomen resembling that which might have been caused by a fairly advanced pregnancy. There was occasional dry vomiting but no pain or tenderness. Investigations showed no evidence of intra-abdominal disease. On being anaesthetized his abdomen became quite flat and no mass or abnormality could be felt on deep palpation. Once consciousness was regained tumefaction returned.

He had married while on leave and learned after returning to duty that his wife was pregnant. It was at this point that his abdominal swelling occurred. His wife suffered greatly from morning sickness and importuned him by letter to return home. He worried greatly over this and at the irregularity of mail.

Altogether his abdominal swelling persisted for 22 months; then he returned home, for the first time since his child was born, and the swelling at once subsided.

Twelve years later the swelling recurred, on this occasion not in relation to a pregnancy (there were no subsequent children) but following separation from his wife. Once again all investigations were negative.

This case is of interest not only because of the nature of the symptom but because psychological investigation revealed factors in line with Reik's formulation of the ritual *couvade*. There was clear evidence of ambivalence in his relationship to his wife which had existed from the very beginning of their marriage. Their sexual relationship was unsatisfactory from the start and subsequently deteriorated to the point when she would lock him out of her bedroom. She subjected him to various indignities which he, for a time, suffered with masochistic fortitude. Furthermore, his mother-in-law who lived with them constantly interfered.

An examination of his background showed him to have been over-attached to his mother. His father had deserted the family when he was a young child. His mother then remarried, but his stepfather so maltreated the patient and

his elder brother that he left home as soon as he was able, and despite his over-attachment to his mother in effect deserted her, as he later deserted his wife.

On being confronted with his swollen abdomen the military authorities made a diagnosis of hysterical pseudocyesis. While there is no doubt that this was a conversion reaction, to call it pseudocyesis was incorrect. The patient himself did not believe he was pregnant; had he done so it would have been necessary to call this a delusion and regard him as psychotic. The physical mechanism underlying the abdominal swelling appears, however, to have been similar to that which Simpson showed, as long ago as 1860, to be that underlying pseudocyesis, and, as with Simpson's cases, the swelling was abolished by anaesthesia.

Ambivalence, although evident in this case, does not account for every instance. In others the key mechanism may be seen to be identification.

#### Case 2

F.L., a 29-year-old man who earned his living as an itinerant house-painter, presented to the casualty department of a general hospital immediately after his wife's admission to the obstetric wards for her first confinement. He complained of 'labour pains', which he said consisted of a sensation of pressure in his pelvis and tightness in his abdomen.

Retrospectively it was discovered that he had suffered various symptoms throughout his wife's pregnancy, including nausea, a feeling of distension and quickening sensations. As her labour proceeded so did his own symptoms progress. When he learned that his wife had undergone an episiotomy he developed perineal soreness. During the first part of her lactation he complained of bilateral breast discomfort. Then, during her involution all his symptoms receded.

Despite the bizarre and prolonged nature of these complaints, and although no physical abnormality was evident, to him his symptoms were undoubtedly real ones. Apart from this he was seen to be a well-preserved schizophrenic, who showed fairly gross thought disorder, multiple delusions, auditory and somatic hallucinations and other unequivocal schizophrenic symptoms. Despite this his personality had remained relatively intact and he had never before received treatment on account of his mental condition.

Also, despite his symptoms, he did not believe that he himself was pregnant. However, he was much preoccupied by ideas of thought transference, telepathy and extrasensory perception. His wife gave an interesting account of how, when she had a headache, he would place his hands upon her head in the belief that he could transfer her headache to himself.

The only significant background factor uncovered was that when he was an infant of eight months his father had suffered from a paranoid schizophrenic illness. He had been admitted to a mental hospital, and the patient's mother refused to take him back.

As soon as his wife was discharged from hospital the patient insisted on taking his own discharge also. Nothing further was heard of him until some months later, when a letter arrived from a doctor in another part of the country asking for advice. It appeared that his wife was pregnant for the second time and his symptoms had begun to recur.

This case provides a clear example of identification of an unusually striking kind. Primary identifications are common in schizophrenia (Freeman *et al.*, 1958) and although usually transient, when they occur with people of emotional importance they tend to be of longer duration. That there was a strong emotional bond between the patient and his wife was clearly shown by his overt anxiety over her state of health even before she became pregnant. The psychological mechanism underlying his symptoms was clear. The fact that he was schizophrenic and that his thinking was governed to a large extent by introjected psychological causality (Arieti, 1959), allowed him to partake of his wife's symptoms, by which magical act he hoped to bring her some relief.

But identification does not operate only at a psychotic level. It is the most important of the psychological mechanisms governing the growth of the ego (Noyes and Kolb, 1963). It may be wish-fulfilling in its purpose and through it some desire, even one not consciously recognized, may be vicariously satisfied. Some psychoanalysts have shown that certain male patients with strong creative trends are envious of female reproductive ability and that their desire to emulate this persists in fantasy (Boehm, 1930). It has been suggested that this, though often concealed behind an appearance of normal masculinity, arises in childhood in relation to anxiety on being confronted by the birth of a younger sibling. How much this mechanism is operative in cases of the couvade syndrome cannot be determined from material at present available, though in the case described by Evans (1951) "parturition envy" seemed to be an important factor.

Identification may also arise out of deep feelings of empathy between man and wife. This in Crawley's view is the principle underlying the ritual couvade:

"Sympathy expressed by contact always tends to pass into substitution and exchange of

identity. He (the father) defends mother and infant by pretending to be the mother—if he pretends to be ill and if his wife goes about her work quietly the evil influences and agencies may possibly be deceived and think that the pretended mother is the real victim" (Crawley, 1927).

Although clear-cut cases of the couvade syndrome, such as the two instances which have been quoted, occur from time to time these appear to be rather rare. Minor manifestations of the syndrome in those who are not overtly psychiatrically abnormal appear to be much commoner. With a view to ascertaining the possible frequency of these reactions, it was decided, therefore, to carry out a survey of certain aspects of the health of expectant fathers.

#### METHOD

A questionnaire was given to 327 men whose wives had just been delivered in hospital. This was designed to elicit facts about age, occupation, number of previous pregnancies, including miscarriages, and state of the husband's health during the preceding 9 months. The subjects were asked to record whether they had suffered from any of a list of symptoms and if so when and for how long. These were:

1. Indigestion or colic
2. Attacks of nausea or sickness.
3. Increased appetite
4. Decreased appetite
5. Diarrhoea
6. Constipation
7. Toothache
8. Backache
9. Other aches and pains

They were also asked if they were anxious about their wives and for what reasons; and if they had symptoms, whether they had had these before in relation to a previous pregnancy, and also whether they normally enjoyed good health. Most of the questions merely required a "yes" or "no" answer with space left for additional information.

A similarly worded though shorter questionnaire, was given to 221 married men whose

wives were within child-bearing age (i.e. not over 44 years) but who had not been pregnant at any time during the previous 9 months. These control subjects were drawn from the administrative, technical and artisan staff of several factories within the same area as that served by the hospital.

All questionnaires, whether given to expectant fathers or controls, were checked on completion by hospital or factory nursing or medical staff. Subjects and controls were matched for social and occupational status, but differed somewhat in their age range: the expectant fathers (E.F.) having a mean age of 28.8 years (S.D. 6.3) and the controls (C) a mean age of 35.2 years (S.D. 7.75). They also differed in the number of their wives' pregnancies, a very much higher proportion of the expectant fathers (57.8 per cent.) having had no previous children as compared to the controls (13.6 per cent.). This discrepancy in matching seemed to be an outcome of difficulty in finding young married childless men whose wives were not pregnant, or who had not recently been so, and the fact that it is more usual for first babies to be born in hospital than subsequent ones. The age difference can be countered to some extent by division into subgroups.

#### RESULTS

1. Without regard to age a significantly larger number of expectant fathers suffered from one or more listed symptoms (No, 1-8) than did the controls (Table I). A slightly smaller but still significant difference may be observed when other symptoms (e.g. other aches and pains) are included.

2. While there was no significant difference in the numbers of those suffering from one listed symptom only, a very much larger proportion of expectant fathers recorded two or more symptoms than did the controls (Table II).

TABLE II  
*Frequency of Listed Symptoms*

	E.F.	C.	
None ..	145	125	$\left\{ \begin{array}{l} \chi^2 = 7.879 \\ P = 0.005 \end{array} \right.$
One only ..	57	52	
Two or more	125	44	$\left\{ \begin{array}{l} \chi^2 = 20.77 \\ P < 0.0001 \end{array} \right.$
Total ..	327	221	

3. On analysis of the frequency of individual symptoms, these, with the exception of backache, may be seen to have occurred more often in the expectant father group than in the controls, but only in the case of loss of appetite, toothache and nausea or sickness does this difference attain statistical significance (Table III).

4. Taking all the listed symptoms and analysing the difference in their incidence in sub-divided age groups, the expectant fathers show an excess of symptoms at all ages except in the case of those aged 45 and over. Since when sub-divided the numbers in each group tend to be small none of these differences attain statistical significance (Table IV).

5. But if the incidence of loss of appetite, toothache and nausea or sickness are considered and combined, it will be seen that the significant

TABLE I  
*Incidence of Symptoms*

	E.F.	%	C.	%	
Total with one or more listed symptoms	182	55.7	96	43.4	$\left. \begin{array}{l} 43.4 \\ 56.6 \end{array} \right\} \begin{array}{l} \chi^2 = 7.879 \\ P = 0.005 \end{array}$
Without .. .. .	145	44.3	125	56.6	
Total with listed and other symptoms ..	186	56.9	101	45.7	$\left. \begin{array}{l} 45.7 \\ 54.3 \end{array} \right\} \begin{array}{l} \chi^2 = 6.61 \\ P = 0.01 \end{array}$
Without .. .. .	141	43.1	120	54.3	
Total .. .. .	327		221		

TABLE III  
Incidence of Individual Symptoms

	E.F.	%	C.	%	$\chi^2$	
Loss of appetite ..	67	20	18	8	15.32	P<0.0005
Tooth-ache ..	76	23	23	10	14.69	P<0.0005
Nausea or sickness ..	68	21	22	10	11.29	P<0.001
Increased appetite ..	41	13	19	9	2.09	} N.S.
Constipation ..	27	8	11	5	1.79	
Indigestion or colic ..	58	18	34	15	0.52	
Diarrhoea ..	26	8	14	6	0.44	
Backache ..	71	22	49	22	0.016	
Other ..	27	8	25	11	1.5	
Total number of subjects	327		221			

TABLE IV  
Incidence of Symptoms in Subdivided Age Groups

Age	E.F.			C.		
	Total	No. with Symptoms	%	Total	No. with Symptoms	%
15-19 ..	10	10	100	2	1	50
20-24 ..	95	58	61	19	8	44
25-29 ..	105	57	55	38	15	39
30-34 ..	54	29	54	53	24	45
35-39 ..	35	21	60	44	21	48
40-44 ..	13	7	54	44	21	48
45- ..	6	2	33	21	11	52
Not known ..	9	2	22	—	—	—
Total ..	327	186	56.9	221	101	45.7

difference in incidence of these symptoms observed in the group as a whole still persists on sub-division into 10-year age groups, except, once again, in the case of those over 45 years (Table V).

6. If the other listed symptoms are similarly treated and their incidence combined and broken down into 10-year age groups, once again the number and percentage of expectant fathers with symptoms, other than those aged 45 or over, exceeds the controls. These differences do not however attain statistical significance except in the 25-34 age group ( $\chi^2=6.25$ ,  $P<0.02$ ).

7. In regard to the duration of symptoms the information obtained was hardly accurate enough to allow valid conclusions to be drawn.

However, two trends emerge: in only 2 (1.5 per cent.) of the 160 expectant fathers in whom the duration of symptoms could be fairly accurately ascertained did these last 9 months or more (i.e. in excess of the period covered by the wife's pregnancy). In contrast 28 (37 per cent.) of 76 control subjects had symptoms lasting 9 months or more. Excluding these, the approximate duration of symptoms was over twice as long in the expectant fathers (11.5 weeks) as in the controls (5 weeks).

8. The severity of symptoms cannot be accurately judged from the results of the questionnaire. Fifty-three (16 per cent.) of the expectant fathers and 22 (10 per cent.) of the controls were absent from work apparently on account of symptoms during the period

TABLE V  
Incidence of Loss of Appetite, Toothache, Nausea or Sickness Combined in 10-Year Age Groups

Age	E.F.			C.			$\chi^2$	
	Total	No. with Symptoms	%	Total	No. with Symptoms	%		
15-24 ..	105	49	46.6	21	4	19.0	5.48	P=0.02
25-34 ..	159	67	42.1	91	23	25.3	7.74	P<0.01
35-44 ..	48	21	43.7	88	19	21.6	7.34	P<0.01
45- ..	6	3	50.0	21	4	29.0	—	
Total ..	318*	140	42.8	221	50	22.6	29.88	P<0.0001

\* 9 subjects of uncertain age excluded.

under review, but this difference is not significant and may have been due, in part, to other reasons.

9. The peak incidence of symptoms in the expectant father group occurred in the third month of pregnancy, steadily diminishing thereafter, with a slight secondary rise during the ninth month usually just before or about the time the wife began labour (Table VI). About

TABLE VI  
Start of Symptoms in Relation to Advance of Pregnancy

Before conception ..	..	..	..	..	2
Months:					
1st ..	..	..	..	..	3
2nd ..	..	..	..	..	7
3rd ..	..	..	..	..	35
4th ..	..	..	..	..	28
5th ..	..	..	..	..	18
6th ..	..	..	..	..	20
7th ..	..	..	..	..	14
8th ..	..	..	..	..	10
9th month or just before labour ..	..	..	..	..	20
					157
Uncertain ..	..	..	..	..	29
Total ..	..	..	..	..	186

43 per cent. of 157 subjects in whom the start of symptoms could be reasonably accurately ascertained developed these in the third or fourth months.

10. In just under a third of cases, symptoms cleared before labour began. More than a third became symptom-free directly after their wives

had given birth. In nearly a quarter, symptoms persisted, though in many instances may have subsided soon afterwards (Table VII). This could not be ascertained, as the questionnaires were filled in for the most part fairly soon after the birth.

TABLE VII  
Cessation of Symptoms

Before labour began ..	..	56	(30%)
Immediately after birth ..	..	66	(36%)
Persistent ..	..	44	(23%)
Uncertain ..	..	20	(11%)
Total with symptoms ..	..	186	

11. There is an obvious association between the occurrence of physical symptoms and anxiety (Table VIII), though no apparent relationship to what the subjects were anxious about, i.e. whether there was a real obstetrical cause for anxiety. Similarly, the number of those

TABLE VIII  
Association of Anxiety and Physical Symptoms

	With Physical Symptoms	Without Physical Symptoms
Anxiety admitted ..	130	67
No anxiety ..	56	74
Total ..	186	141

$\chi^2 = 16.77, P < 0.0005.$

with symptoms whose wives had previously had miscarriages (14 per cent. of 186) was somewhat smaller than the number who were symptom-free (17 per cent. of 141).

12. Apart from anxiety, there is also a significant relationship to be seen between the occurrence of physical complaints and other recorded psychiatric symptoms, i.e. depression, tension, insomnia, irritability, nervousness, weakness, headaches and stuttering (Table IX).

TABLE IX  
*Association of Psychiatric and Physical Symptoms*

	With Physical Symptoms	Without Physical Symptoms
With psychiatric symptoms	69	30
Without .. .. .	117	111
<b>Totals</b> .. .. .	<b>186</b>	<b>141</b>

$$\chi^2 = 9.484, P < 0.005.$$

13. Those having their first child appeared to be no more liable to symptoms than those who already had one or more. The same is applicable to the control group, who showed no significantly greater incidence of symptoms among the childless as opposed to those who had children.

14. Of the 155 expectant fathers who already had other children and recorded symptoms on the present occasion, 109 (71 per cent.) stated they had not been affected during previous pregnancies. Forty-three (29 per cent.) stated they had been similarly affected before on the occasion of at least one of their wives' pregnancies, and 3 (2 per cent.) in some other way.

#### COMMENT

As has been shown (Table I), 186 (57 per cent.) of the expectant fathers recorded symptoms, whereas only 101 (46 per cent.) of the controls did so. This difference has already been found to be significant. Had the proportion of expectant fathers been exactly the same as the controls, only 150 would have recorded symptoms. This leaves 36 cases, approximately 11 per cent. of the whole group

or 19 per cent. of those with symptoms unaccounted for. It is this proportion who may have been affected by their wives' pregnancies as opposed to having symptoms due to other causes.

A more tentative conclusion may be based on the different pattern of duration of symptoms in the two groups. This in the controls appeared to be bimodal, being either much longer or much shorter than in the expectant fathers, suggesting that, in some instances at least, the causes of origin of the symptoms differed in the two groups. The longer duration of symptoms in a considerable proportion of the control group suggests a higher incidence of chronic disability, which may perhaps be a factor of the greater age of this group when compared with the expectant fathers. The shorter duration of symptoms among the remainder of the controls may be indicative of transient, possibly infectious, disorders.

The survey only provides limited information as to the type and combinations of symptoms peculiar to each group. As may be seen, the expectant fathers suffered significantly more often from anorexia, toothache and nausea or sickness than the controls. But had an alternative check-list of symptoms been offered other differences might have emerged.

The study of individual cases shows, however, that, while the pattern of couvade symptoms varies, those which relate to the gastrointestinal tract are among the most usual. While some of these are without doubt no more than common somatic accompaniments of anxiety, the association between expressed anxiety and physical symptoms is incomplete. Almost one-third of those with physical symptoms denied feeling anxious, whereas almost half of those without symptoms admitted being anxious (Table VIII).

Where vomiting occurs, as it may do quite strikingly in some cases of the couvade syndrome, this may possibly be regarded as a conversion symptom rather than as a simple manifestation of an anxiety state, the more so where the connection between it and the wife's pregnancy passes unperceived.

Toothache is more difficult to explain. It is not usually regarded as an anxiety symptom;

and its origin under these circumstances is obscure. The difference in the incidence of toothache cannot be accounted for by the possibility of there being a very much higher rate of edentulousness among the controls, for, according to the Dental Estimates Board's statistics, edentulousness occurs in about 6 or 7 per 1,000 of those aged 28-29 years and about 10 per 1,000 of those aged 35 years. As these two figures approximate to the mean ages of the two groups it is likely that their rates of edentulousness differed only very slightly and certainly insignificantly.

There is a good deal of curious folklore concerning teeth, some of which is of deep psychological significance. A possible though somewhat superficial reason for toothache as a couvade symptom may be that it is the outcome of a still widely held belief that pregnancy damages a woman's teeth. This, apart from those cases in which dietary changes during pregnancy lead to a much greater intake of refined carbohydrates, is a fallacy. But if both husband and wife believe in it, its occurrence in the former may possibly be construed as another example not of ordinary tooth decay but of identification or sympathetic magic.

#### SUMMARY

An investigation was carried out of certain aspects of the health of 327 husbands during their wives' pregnancies. These were compared with 221 other married men whose wives were not pregnant or who had not been so during the preceding 9 months.

Assessment of the results shows that a significantly greater number of expectant fathers were affected by a variety of symptoms than were the controls. In particular they were found to suffer significantly more often from loss of appetite, toothache and nausea or vomiting. It is concluded from this survey that possibly about 1 in 9 (11 per cent.) of all expectant fathers may have some symptoms of psychogenic origin in relation to their wives' pregnancies.

From the study of these and of individual cases in greater detail, it is seen that symptoms tend to occur at any time from about the third

month of pregnancy onwards. Whereas they may resolve before termination, in many cases they do not cease until after labour is concluded. The symptoms which occur most often reflect a functional disturbance of the alimentary tract.

Whereas the basic cause of the syndrome is anxiety about the possible dangers of child-birth, the relationship of the symptoms to this event is not always perceived by the sufferer. In some cases the symptoms are a simple somatic manifestation of anxiety; in others more in the nature of conversion reaction.

There appear to be several underlying mechanisms at work, including ambivalence in the marital relationship, possibly parturition envy, and most important of all identification.

The relationship of the couvade syndrome to the ritual couvade is discussed.

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