La belle indifférence in conversion symptoms and hysteria

Systematic review

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Background *La belle indifférence* refers to an apparent lack of concern shown by some patients towards their symptoms. It is often regarded as typical of conversion symptoms/hysteria.

Aims To determine the frequency of *la belle indifférence* in studies of patients with conversion symptoms/hysteria and to determine whether it discriminates between conversion symptoms and symptoms attributable to organic disease.

Method A systematic review of all studies published since 1965 that have reported rates of *la belle indifférence* in patients with conversion symptoms and/or patients with organic disease.

Results A total of 11 studies were eligible for inclusion. The median frequency of *la belle indifférence* was 21% (range 0–54%) in 356 patients with conversion symptoms, and 29% (range 0–60%) in 157 patients with organic disease.

Conclusions The available evidence does not support the use of *la belle indifférence* to discriminate between conversion symptoms and symptoms of organic disease. The quality of the published studies is poor, with a lack of operational definitions and masked ratings. *La belle indifférence* should be abandoned as a clinical sign until both its definition and its utility have been clarified.

Declaration of interest None.

La belle indifférence is defined in the DSM–IV description of conversion disorder (previously referred to as hysteria) as 'a relative lack of concern about the nature or implications of the symptoms' (American Psychiatric Association, 2000). Although not one of the diagnostic criteria for this condition, it is the first feature mentioned in the list of 'associated descriptive features' and it also appears in the description of ICD–10 dissociative disorder (motor type; World Health Organization, 1992). However, the usefulness of this clinical sign remains controversial. We therefore conducted a systematic review to establish the reported frequency of *la belle indifférence* in patients with neurological symptoms that could not be explained by organic disease (conversion symptoms/hysteria) compared with patients with confirmed organic disease. We assessed the quality of the published studies and explored how the concept of *la belle indifférence* might be refined.

METHOD

Search strategy

The following databases were searched: Medline (1966 to December 2003), Cinahl (1982 to December 2003), EMBASE (1980 to December 2003) and PsycINFO (1965 to December 2003). We used all the vocabulary headings within each database for symptoms unexplained by organic disease, as well as the following text words: PSYCHOSOMATIC, PSYCHOGENIC, SOMATISATION, UNEXPLAINED, CONVERSION, NON-ORGANIC and DISSOC*. They were combined with text words for PARALYSIS, PARESIS, SENSORY DISTURBANCE, DEAFNESS, HEARING, VIS*, BLIND* and MOVEMENT DISORDERS. References to pseudoseizures were searched using the following text words: PSEUDOSEIZURE, NON-EPILEPTIC and HYSTERICAL ATTACK. In addition, all references under the heading 'conversion disorder' or with the text words HYSTERI*, INDIFFERENCE or ANOSODIAPHORIA (a term used to describe patients with cortical neglect who are indifferent to their disability) were examined. The titles and abstracts were reviewed online, and reprints of all studies that might contain data on *la belle indifférence* were obtained. The reference lists of all articles obtained were hand-searched for further articles published after 1965 (to match the electronic search strategy). Reports written in English, French and German were included.

Inclusion criteria

Studies were included only if they met the following criteria.

(a) The patients were reported to have neurological symptoms. If these were described as unexplained, functional, non-organic or psychogenic, or were labelled as hysterical or conversion disorder, the data were placed in the 'conversion symptoms/hysteria' group. We included the symptoms of paralysis, weakness, sensory disturbance, movement disorder, visual loss, hearing loss and non-epileptic seizures. We also included studies reporting functional motor or sensory symptoms associated with pain but excluded studies in which unexplained pain was the sole symptom.

(b) Data could be extracted about the frequency of *la belle indifférence* in the sample.

(c) There were more than 10 participants in the study.

(d) The participants were over 16 years of age.

Data extraction and analysis

All reports were reviewed independently by three investigators (J.S., R.S. and A.C.). Discrepancies were resolved by a fourth and fifth adjudicator (M.S. and C.W.). Data were collected on the frequency of *la belle indifférence*, the setting of the study, the sampling method, the symptoms and case definition of the patients and the year of study. We calculated odds ratios for those studies that included control groups using Review Manager 4.2.7 for Windows (http://www.cc-ims.net/RevMan).

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RESULTS

In total, 11 studies met the inclusion criteria (Lewis & Berman, 1965; Raskin *et al*, 1966; Weinstein & Lyerly, 1966; Weinstein *et al*, 1969; Barnert, 1971; Dickes, 1974; Gould *et al*, 1986; Kapfhammer *et al*, 1992; Chabrol *et al*, 1995; Ebel & Lohmann, 1995; Sharma & Chaturvedi, 1995). Together these studies reported on a total of 356 patients with conversion symptoms and 157 patients with organic disease (see Table 1 and Fig. 1). Six studies were of conversion symptoms/hysteria only and four used a case–control design (Raskin *et al*, 1966; Weinstein & Lyerly, 1966; Barnert, 1971; Chabrol *et al*, 1995). One study included only patients with organic disease (Gould *et al*, 1986). Two studies were excluded. One of these included only children (Siegel & Barthel, 1986); the other (Reed, 1975) was excluded because it was not clear how many patients had *la belle indifférence*.

Analysis

The results of the systematic review are shown in Table 1 and Fig. 1. The median frequency of *la belle indifférence* in studies of 356 patients with conversion symptoms was 21% (range 0–54%). In studies of 157 patients with organic disease, the median frequency was 29% (range 0–60%). Four studies included control groups with disease. Analysis of odds ratios indicated that one controlled study found *la belle indifférence* to be significantly more common in hysteria (Barnert, 1971), whereas the other three found no significant differences between patients with conversion symptoms and controls with organic disease (Raskin *et al*, 1966; Weinstein & Lyerly, 1966; Chabrol *et al*, 1995). An additional study of 30 patients with only organic disease (mainly stroke) reported *la belle indifférence* in 27% (Gould *et al*, 1986).

When studies were ordered by year of publication, no trend towards an increase or decrease in reporting of *la belle indifférence* over time was apparent. Of the 11 studies, 7 concluded that *la belle indifférence* was not helpful for differentiating those with conversion symptoms from those with organic disease. The other 4 did not comment on its utility.

The quality of the studies was generally poor. Only 6 studies were clearly of consecutive patients (Table 1) and only 6 studies were prospective (Table 1). The latter is important because a retrospective case-note review is unlikely to be a valid means of determining the presence of a clinical sign. Only 8 studies recorded the actual physical symptoms that led to the diagnosis of conversion symptoms (Table 1). This is also an important limitation, as it is much easier to detect *la belle indifférence* in a patient with paralysis than in an individual with non-epileptic seizures who is asymptomatic between episodes.

Only 2 studies clearly described what they meant by *la belle indifférence* (Ebel & Lohmann, 1995) or referenced another description (Gould *et al*, 1986), and none discussed any of the difficulties in making this judgement (see below). Although 1 study used a system of re-rating to improve the reliability of the clinical diagnosis of *la belle indifférence* (Barnert, 1971), these data were not presented in the paper. Finally, in none of the studies were the investigators masked to the patient's diagnosis when assessing whether *la belle indifférence* was present.

DISCUSSION

The evidence from the published literature suggests that *la belle indifférence* is not a useful clinical sign for distinguishing between conversion symptoms and organic disease. The quality of the published studies was poor, many were retrospective, many provided an incomplete description of the patients' symptoms, and none used operational criteria and masked ratings to assess whether *la belle indifférence* was present.

Limitations

The conclusions of this review must be qualified by the limitations inherent in the studies that it included. In addition, there were limitations in the methodology used for the systematic review. First, we only included studies that had been published since 1965. To our knowledge, no large relevant studies were published before that date. Second, the total number of patients in the review is small. Third, some of the patients who were included may have been wrongly diagnosed, although this is unlikely to be a major factor, as a systematic review found the overall rate of misdiagnosis of conversion disorder to be only 4% since 1970 (Stone *et al*, 2005).

Meanings of *la belle indifférence*

The term *la belle indifférence* seems to have gained popularity after Freud used it to describe 'Elizabeth von R' in *Studies on Hysteria* (Breuer & Freud, 1895). Freud later attributed the term to Charcot (Freud, 1915), which suggests that it may have been widely used from the end of the nineteenth century onwards. Janet (1907) briefly mentions indifference to both sensory loss and paralysis in his book, *The Major Symptoms of Hysteria*, but does not appear to use the term '*la belle indifférence*'. We could not find the term in any of the other well-known books about hysteria published at that time, including Charcot's translated lectures (Skey, 1867; Charcot, 1889; Savill, 1909; Fox, 1913), although indifference to areas of anaesthesia on examination was mentioned in many of those texts (see below). Thus, if the term was used clinically at that time, it was not deemed sufficiently important to be included in many texts about hysteria. It appeared with more regularity towards the middle of the twentieth century, predominantly in the psychoanalytical literature, before it achieved more widespread usage.

In tracing the history of the term '*la belle indifférence*', it is clear that it has had more than one meaning since it was first used. We summarise these below.

Hysterical 'stigmata' or sensory signs of which the patient is unaware

The commonest description of indifference in the early literature related to the discovery of sensory signs or 'stigmata' of which the patient was unaware. Janet expressed this common clinical observation as follows:

> This absence of objective disturbances is mostly accompanied by a very curious subjective symptom; namely, the **indifference** of the patient. When you watch a hysterical patient for the first time, or when you study patients coming from the country, who have not yet been examined by specialists, you will find, like ourselves, that, without suffering from it and without suspecting it, they have the deepest and most extensive anaesthesia. . . . Charcot has often insisted on this point and shown that many patients are much surprised when you reveal to them their insensibility.
>
> (Janet, 1907)

Charcot and Janet described 'hysterical stigmata' such as hemisensory disturbance, ipsilateral constricted visual fields and reduced hearing, which were

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Table 1 Studies reporting *la belle indifférence* in patients with conversion symptoms and organic disease

Authors of study	Year	Number of patients				Setting	Methods	Diagnosis	Symptoms	Definition and reliability measure of BI	Overall opinion of BI
		Conversion symptoms		Organic disease							
		n	BI, %[1]	*n*	BI, %[1]						
Lewis & Berman	1965	57	7			IP, Med	NC, Re	Hysteria	Unknown[3]	No, No	Negative
Raskin *et al*	1966	32	41	7	43	IP, OP, P	C, Pr	Conversion reaction	W (18), MD (5), S (6), Sp (3). Disease: stroke, brain tumour, dystonia, multiple sclerosis, phenothiazine reaction, myelitis	No, No	Negative
Weinstein & Lyerly	1966	14	7	17	0	IP, OP, Mil	NC, Re	Conversion hysteria	S (6), W (3), Sp (2), D (1), MD (2)[2] Disease: closed head injury	No, No	Uncertain
Weinstein *et al*	1969	16	0			IP, N, Mil	U, Pr	Conversion hysteria	'Neurological symptoms'	No, No	Uncertain
Barnert	1971	46	54	63	14	OP, P	NC, Re	Conversion reaction	W (22%), pain (26%), V/D (6%), NES (11%), Sp (9%), MD (11%). Disease: peptic ulcer, enteritis, ulcerative colitis, asthma, cardiac, hypertension, migraine, thyroid, rheumatoid arthritis	No, No	Uncertain
Dickes	1974	16	31			IP, P	U, Re	Conversion reaction	W/MD/G (8), D (2), NES (1), V (2), S (1), Sp (1), pain (1)	No, No	Uncertain
Gould *et al*	1986			30	27	IP, N	C, Pr	Neurological	Disease: acute neurological problem (stroke 83%)	Yes, No	Negative
Kapfhammer *et al*	1992	103	16			IP, OP, P	C, Re	Conversion disorder	W (51%), S (43%), pain (11%)	No, No	Uncertain
Chabrol *et al*	1995	15	40	40	60	IP, N	C, Pr	Conversion disorder	W (7), S (2), NES (3), Mixed (3). Disease: stroke (10), brain tumour (14), epilepsy, encephalitis, vertigo, multiple sclerosis, cerebellar degeneration, CJD, radiation myelopathy, cervical myelopathy, myasthenia	No, No	Negative
Ebel & Lohmann	1995	22	27			IP, OP, P	C, Pr	Conversion disorder	W/MD (15), S (1), NES (2), other (2), Sp (3)	Yes, No	'Lesser diagnostic value'
Sharma & Chaturvedi	1995	35	6			IP, OP, P	C, Re	Hysteria	U (hysterical conversion 100%)	No, No	Uncertain

BI, *la belle indifférence*; IP, in-patients; OP, out-patients; P, psychiatry; Mil, military; N, neurological; Med, medical; C, consecutive; NC, non-consecutive; U, uncertain; Pr, prospective; Re, retrospective; W, weakness; MD, movement disorder; S, sensory; Sp, dysphonia; V, vision; D, deafness; MD, movement disorder; NES, non-epileptic seizures; CJD, Creutzfeldt–Jakob disease; G, gait; U, unknown.

1. Percentage of sample described as displaying *la belle indifférence*.
2. All cases and controls were male and had closed head injuries.
3. 35% had obvious hysterical signs; 95% had symptoms of the voluntary nervous system, including pain.

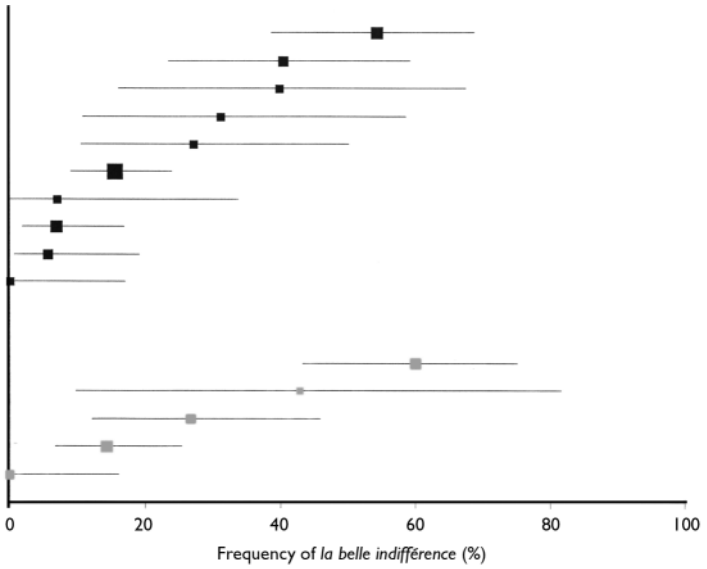

Fig. 1 Frequency of *la belle indifférence*. Each point represents an individual study in the review, and the size of the point is related to the number of the patients in the study. The lines represent 95% binomial exact confidence intervals. ■ Conversion symptoms/hysteria (n=356); ■ organic disease (n=157).

characteristically noticed on examination but not reported by the patient (who nevertheless did report other distressing symptoms). Centuries earlier, similar sensory 'stigmata' were used as evidence of witchcraft. This clinical phenomenon continues to be seen frequently and is recognised by neurologists as functional or psychogenic (Toth, 2003). However, lack of awareness of sensory disturbance is distinct from the serene indifference to actual disability that is suggested by contemporary descriptions of *la belle indifférence*.

Conversion of distress

The classic psychoanalytical interpretation of *la belle indifférence* is that it is evidence that an intrapsychic conflict has been converted and kept from its unacceptable conscious expression by the production of a physical symptom – so-called primary gain. Freud was the first to admit that this process of conversion was not always complete. However, when it is present *la belle indifférence* appears to represent physical evidence of the conversion process at work, and could be seen as potent evidence of its truth (one reason, perhaps, why it has been such a celebrated sign; Abse, 1966). As psychodynamic theory has progressed, more complex hypotheses have arisen to challenge this rather 'hydraulic' model of conversion (Chodoff, 1954; Greenberg & Mitchell, 1983). For example, Merskey (1995) suggested that some patients may simply be relieved that they have escaped a more difficult problem in their life by becoming ill. However, the simple conversion model is still the most well known, perhaps because of the persistence of the term 'conversion disorder'.

The simple conversion hypothesis is at odds with what is known about the frequency of psychiatric disorder and emotional distress in patients with conversion symptoms. Depression and anxiety are reported in 20–50% of patients with conversion symptoms (Wilson-Barnett & Trimble, 1985; Lecompte & Clara, 1987; Crimlisk *et al*, 1998). In addition, these patients invariably come to medical attention because they are distressed by their symptoms. These observations do not necessarily negate the conversion hypothesis. However, it must now compete with or accommodate other theoretical developments in this area, including the advances in cognitive neuropsychology and neurobiology discussed below (Spence, 1999; Halligan *et al*, 2001; Brown, 2004).

Alternative explanations for apparent indifference

'Putting on a brave face' to avoid a psychiatric diagnosis

Freud's first use of the term *la belle indifférence* – to describe his patient Elizabeth von R in *Studies on Hysteria* – implies not so much a denial of disability that is obvious to everyone else, as 'putting a brave face on things'.

> She seemed intelligent and mentally normal and bore her troubles, which interfered with her social life and pleasures, with a cheerful air – the **belle indifférence** of a hysteric, I could not help thinking.
>
> (Breuer & Freud, 1895)

Patients with physical symptoms that cannot be explained by organic disease commonly combine clear distress about their physical symptoms with apparent resilience and cheerfulness. However, such cheerfulness is often easy to expose as superficial and as a 'mask' for the depression or anxiety that is identified by a more searching interview. In many cases, strenuous efforts at cheerfulness may simply reflect a desire by patients not to see themselves or be labelled by others as 'depressed' or 'psychiatric' cases. The following anonymised case from our own recent practice illustrates this:

> A young woman had an attack characterised by panic with prominent dissociation, unresponsiveness and limb shaking during venepuncture the day after a surgical procedure. After a period of drowsiness she was found to have a marked right hemiparesis. Investigations to search for a neurological cause of her symptoms were negative and there were positive clinical features in favour of a diagnosis of conversion disorder, including a tubular visual field and strongly positive Hoover's sign on the affected side. The referring doctors commented on her affect, which was recorded in the notes as 'unconcerned', 'unusually cheerful' and 'indifferent'. Nursing staff agreed that this was her consistent affect. At interview the patient smiled frequently and did indeed appear unworried by her hemiparesis, even though she had no movement in her right arm and was unable to walk. After 20 min of interviewing, the patient was asked about her apparently cheerful demeanour. 'Is this really how you are feeling about things or do you think you might be "putting a brave face on things"?' The patient burst into tears and admitted being terrified both by her symptoms and by the possibility that someone was going to think she had 'gone crazy'.

Patients often view psychiatric labels for physical symptoms as an implication that the symptoms are fabricated, imagined or relate to 'going mad' (Stone *et al*, 2002*a*). In addition, patients with conversion symptoms tend to express the conviction that an organic disease is responsible for those symptoms even more strongly than patients whose symptoms are actually a result of an organic disease (Creed *et al*, 1990; Binzer *et al*, 1998). It is hardly surprising, therefore, that many patients with these symptoms may try hard not to appear like 'psychiatric' cases. Thus, superficial cheerfulness in the face of adversity in an attempt to avoid a psychiatric diagnosis is not the same as indifference to physical disability as implied by *la belle indifférence*.

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Attentional impairment or 'absent-mindedness'

Another difficulty in the assessment of *la belle indifférence* is defining for how much of the time the indifference is present and whether it is present when the patient is specifically asked about their disability. For example, a patient may appear indifferent most of the time but be quite clearly concerned when asked about their paralysed leg.

Lasegue and Janet wrote about the 'absent-mindedness' of 'hystericals' (Janet, 1901). Lasegue considered it to be a core psychological feature related to 'general preoccupation'. Janet described it as follows:

> an exaggerated state of absent-mindedness, which is not momentary and is not the result of voluntary attention turned in one direction; it is a state of natural and perpetual absent-mindedness which prevents those persons from appreciating any other sensation except the one which for the time occupies their mind.
>
> (Janet, 1901)

Such 'absent-mindedness' would not be calm acceptance of disability but simply a general diminution of attention masquerading as indifference. The findings of a neuropsychological study of patients with conversion disorder have provided some support for this attentional hypothesis (Roelofs *et al*, 2003).

La belle indifférence as a marker of factitious disorder

One final possible explanation of *la belle indifférence* is that it is the affect of someone who knows that their symptoms are under conscious control and who is therefore not concerned about them. There are no data to support or refute this hypothesis.

La belle indifférence: a biological perspective

If we accept that *la belle indifférence* does sometimes occur in conversion disorder, are there plausible biological reasons why this may be so? Anosognosia (denial of hemiplegia) and anosodiaphoria (indifference to hemiplegia) are surprisingly common clinical features of hemispheric lesions, particularly right parietal stroke. In one study, anosognosia was found in 28% and anosodiaphoria in another 27% of 171 patients with right hemisphere stroke (Stone *et al*, 1993). Many authors have suggested that this may tell us something about the biology of *la belle indifférence* in conversion disorder. Functional neuroimaging is certainly now being used to explore the neural correlates of 'hysterical' motor and sensory symptoms. For example, in one study the hypoactivation of the contralateral thalamus seen in patients with hemisensory conversion symptoms recovered when the symptoms resolved (Vuilleumier *et al*, 2001). Perhaps similar dysfunction of parietal areas could lead to *la belle indifférence*. However, there are two problems with this. First, as we have already mentioned, the existence of *la belle indifférence* is under threat because of its poor definition and the potential for misdiagnosis. Second, part of this biological hypothesis of *la belle indifférence* has been based on the idea that conversion symptoms, like neglect, invariably lateralise to the left side of the body. Both a recent study (Stone *et al*, 2002*b*) and an earlier systematic review (Jones, 1908) found that there was little evidence to support this hypothesis, particularly when the symptom is paralysis.

An alternative but again unproven biological explanation for *la belle indifférence* is that patients with severe conversion symptoms have frontal hypoactivation (Spence *et al*, 2000) that could potentially contribute to a syndrome of apathy and indifference.

Other clinical signs of conversion disorder

The survival of *la belle indifférence* as a clinical sign over the past century should also be viewed in the context of the other clinical signs of conversion disorder/hysteria, such as collapsing weakness and 'midline splitting' of sensory loss. These signs have rarely been assessed in clinical studies and often show poor reliability for the identification of conversion disorder when they are tested in this way (Stone *et al*, 2002*c*). Although some clinical signs, such as Hoover's sign for paralysis, have recently been shown in some small studies to be potentially more reliable (Ziv *et al*, 1998), it is perhaps not surprising that, among such untested signs, *la belle indifférence* has survived unchallenged for so long.

Theoretical and clinical implications

It is not difficult to see why *la belle indifférence* has continued to be included as a feature of conversion disorder. First, it has a romantic history providing a link between modern practice and famous historical figures such as Charcot and Freud. Giving any clinical sign a memorable name tends to heighten its profile (and doing so in French perhaps heightens it even more). Second, it is consistent with beliefs about the conversion of emotional distress into physical symptoms, which despite the lack of evidence for them are widely held. Third, theories linking *la belle indifférence* to right hemisphere dysfunction may have promoted the survival of the concept in an era of biological psychiatry. Fourth, it is yet another untested clinical sign among other untested clinical signs for 'hysteria'. Finally, clinicians may not always have considered the 'differential diagnosis' of an apparently indifferent state. In our experience, this is most commonly manifested as an apparently cheerful patient with disability who is actually distressed but who makes strenuous efforts to avoid providing possible evidence for those seeking to make a psychiatric diagnosis, and thus to avoid the stigma associated with the latter.

The findings of this systematic review do not support the use of *la belle indifférence* as a clinical sign for discriminating between conversion symptoms/hysteria and organic disease. The review also highlights the poor quality of the published studies that have addressed the subject, and raises questions about what *la belle indifférence* actually means. We conclude that further research is required to define and study apparent indifference, in particular looking for alternative explanations for this sign. Despite its attractive name, *la belle indifférence* should be abandoned as a clinical sign until both its definition and its utility have been clarified.

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CLINICAL IMPLICATIONS

- The available evidence suggests that *la belle indifférence* does not discriminate between conversion symptoms/hysteria and symptoms of organic disease.
- *La belle indifférence*, defined as a lack of concern about symptoms, may be confused with other reasons for apparent indifference, most commonly strenuous efforts by a patient to appear cheerful so as to avoid being labelled as a 'psychiatric case'.
- The use of the term should be abandoned until its definition and utility have been clarified.

LIMITATIONS

- The published studies of *la belle indifférence* are of poor methodological quality, are unmasked and lack operationalised criteria.
- The total number of patients included in the review is relatively small.
- Studies published before 1965 were not included in the review.

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