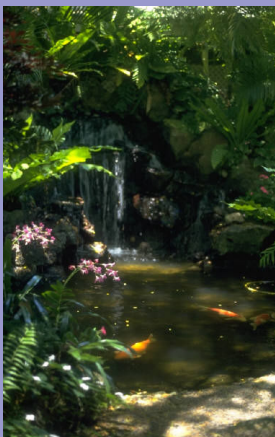


Sal's Place

“By the authors implication that MCS does not exist, neither does somatization disorder or depression!”



It is disheartening when a researcher publishes a review which examines or attempts to prove a viewpoint about a condition that is contrary to literature at large. Das-Munshi J, Rubin GJ, and Wessely S (2007) of Kings College London, Institute of Psychiatry did just that in *Multiple chemical sensitivities: review*. Das-Munshi's review looked mainly at psychological studies on MCS to support her viewpoint. She completely failed to consider the biological studies in literature, which outweigh psychological studies approximately 2:1. Her review was therefore incomplete, misleading, and inaccurate.

The first section "diagnosis and epidemiology" contradicts itself by using "absence of specific biological tests" to downplay the existence of multiple chemical sensitivity (MCS), while at the same time stating lymphocyte depletion and immunological differences present in MCS are also present in somatization disorders and depression, both of which also have an "absence of specific biological tests" themselves. By the authors implication that MCS does not exist, neither does somatization disorder or depression! In many cases, somatization disorder and depression are not actual mental illnesses, but rather symptoms caused by toxic chemical injury or an undiagnosed underlying medical condition and hence may have a biological origin.

The second page continues the misinformation with discussion of "active and sham" substances used in provocation challenges. Here, Das-Munshi claims that MCS subjects reacted to the sham substances in a test which in her per-

ception supports her claim to a psychological origin for MCS. She failed to mention the fact that the sham substances used in the study were indeed also chemical substances. Knowing the sham substances were chemicals, it is easy to see why a chemically sensitive subject would react to the sham substances. The fact that a reaction did indeed occur to these chemicals actually supports the subjects belief that the chemicals are the cause of the reactions. Hence, she failed to examine the study close enough to uncover this crucial detail.

Das-Munshi goes on to suggest that reactions to chemicals experienced by subjects may be Pavlovian learned responses, yet there are no supporting studies for this claim. Das-Munshi's claim also fails to pass the test of logic. If, for example, an individual was fired (US) and associated the bosses cologne (CS) with ill feelings (UR/CR) in Pavlovian conditioning, then why would that individual have reactions to multiple classes of chemicals with explicitly varying odors (CR?) that are completely unrelated to the bosses cologne? Also lacking in this theory is the requirement of repeated exposure to the conditioned stimulus for learning to occur. Even if we were to go as far as saying that a subject learned to fear chemicals in general from this experience, as Little Albert learned to fear all furry animals in a classical conditioning experiment, repetition is missing. The subject would have to know that chemicals are in the cologne that the majority of the population generally regards as safe. Then the subject would need to add shampoo, glass cleaner, fabric softener, newspaper, carpet, and more to their repertoire of chemical incitants.

**“Finally,
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Das-Munshi also makes the error of assuming that co-occurring depression in a portion of subjects is the cause of MCS. If this were true, then 100% of the subjects would have co-occurring depression. Since that is not the case, depression may be ruled out as an etiologic mechanism. Das-Munshi does not examine the possibility of reactionary depression, in which people become depressed from lifestyle, financial, and social limitations as a result of a chronic illness. Reactionary depression is much more likely a result of living within the limitations of MCS. This in no way suggests that MCS itself is caused by psychological mechanisms. And indeed, no illness has ever been proven to result from psychological causes with specific biological tests. Nearly every illness known to medicine was first thought to be psychological until the biological etiology was discovered.

Das-Munshi failed to review studies on diagnosed cases of MCS that met the case criteria established by 89 cli-

nicians and researchers in 1989 and revised in 1999, so her results are bound to be skewed and not representative of the population who meet the case criteria for diagnosis with MCS. She may well be looking at studies that do not represent the MCS population at all, but rather subjects with other etiologies for their symptoms. It is crucial that studies on MCS first apply the diagnostic criteria to subjects or select diagnosed subjects, lest the data obtained from the study be grossly flawed.

Finally, Das-Munshi’s review failed to consider the variety of physiological, biochemical, and genetic studies on MCS. She has not provided any explanation for the factors distinguishing the chemicals involved in MCS from those that have no role, and she completely ignored the prospects for objective biomarker tests for MCS that have been published by Kimata, Millqvist, Bell, and Fox, each of which is based on measurable physiological changes in response to low level chemical exposures of MCS patients (Millqvist et al, 1999; Millqvist et al, 2005; Bell et al 1996; Bell et al 1998; Joffres et al, 2005). Most importantly, she has ignored the genetic data of McKeown-Eyssen and the earlier work of Haley showing that the chemicals initiating MCS act as toxicants, not as odors generating some strictly olfactory response (McKeown-Eyssen, 2004; Haley, 1999). These specific studies provide significant implication of the toxicogenic roles of chemicals previously implicated in MCS (McKeown-Eyssen, 2004; Haley, 1999).



“Das-Munshi failed to review studies on diagnosed cases of MCS that met the case criteria.”

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Multiple chemical sensitivities: review.

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PURPOSE OF REVIEW: There have been a number of recent studies examining behavioural and social factors in the potential cause of Multiple Chemical Sensitivities, or Idiopathic Environmental Intolerance. The current review will draw together recent research and suggest directions for future investigation.

RECENT FINDINGS: Recent studies have implicated a number of different perspectives which may be helpful in understanding the cause of chemical sensitivities. A multifactorial model incorporating behavioural, physiological and sociological approaches may be useful. Cultural and historical factors, alongside individual expectations and beliefs, as well as maladaptive learning and conditioning processes, may be important in the specific cause of chemical sensitivities. Iatrogenesis, through the promise of unproven 'therapies', may perpetuate reported symptoms further. Although there are many recent experiments implicating potential behavioural or psychological causes for Multiple Chemical Sensitivities, there remains a paucity of treatment trials for this condition.

SUMMARY: Good-quality treatment trials examining psychological/behavioural approaches in the management of Multiple Chemical Sensitivities are urgently needed.

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