pregnancy stimulates breath and lowers pCO_2; therefore pregnancy would protect patients by increasing the distance of their pCO_2 levels from panic threshold. Klein also suggested that lactation protects against PD because oxytocin may be active against anxiety. During pregnancy, nonpharmacologic strategies, such as cognitive behavioral therapy, are preferable to antipanic medications. These strategies, however, may not always suffice, and clinicians may need to use medications for pregnant women who remain severely symptomatic. Our cases suggest that some subgroups of PD women may be particularly vulnerable to persistence of symptoms during pregnancy. Tricyclic antidepressants are a reasonable choice, because the data on their use in pregnancy show they do not seem to be associated with teratogenic effects.[5]

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Epistemology: who needs it?

Epistemology is the discipline that studies how do we construct knowledge, or how do we know what we think we know. Recently CMAJ Editorial[1] stressed the need of using clearer theoretical frames to construct pertinent research questions, that is, how do we construct our knowledge, or what beliefs, or foundations, underlie our research. For instance, the old theory that 'breast cancer begins as a local disease and then metastasizes'[1] prevalent in our thought since the early 1990s, have mastered most of research designs until recent times. A strong consequence of this modeling was the worldwide promotion of breast self-examination as a safe method for prevention. But, all this 'knowledge' is now under challenge. The finding that early stages of breast cancer may occur with simultaneous micrometastases in the bone marrow[1] creates a conflict with the old model of thought, and the necessity of changing. Findings like the above, or other, in very different fields are striking facts for epistemological challenges. In the field of psychotherapy outcomes many authors have directed their research under the theoretical belief that psychotherapy sessions are comparable with drug treatment. Some researchers have been referring to the 'abuse of the drug metaphor'[2] as a strong bias perceived through epistemological analysis.

The use of epistemological analysis directed to the critical approach of our knowledge is a new breath for researchers. In epidemiology, authors scarcely open their time for epistemological analysis. Victora et al[3] stressed that the construction of suitable epidemiological designs require the analysis of the conceptual frameworks. A complex model – using not only statistical premises, but including also social and biological backgrounds – offers more meaningful interpretations of data. Failure to take the need of an epistemological consideration 'is common in the epidemiological literature and leads to underestimation of the effects of distal determinants'.[3]

Epistemology focuses on the degrees of certainty and probability of a certain field of knowledge, searching for validation, and logical foundation to state what we state. Epistemology has a variety of objectives: 1) to clarify the paradigm researchers use to construct observations and theories, 2) to evidence the internal and relational coherence between theories, 3) to determine the levels of assurance of constructs (the problem of certainty and belief), and 4) to design the mental activity (thinking, language, inference, use of reason, use of *a priori* and hidden prejudices) used to construct science. Epistemology may be understood as a science whose aim is the quality of knowledge.

The universal value of epistemology have been first recognized in the human sciences. The philosophical root of epistemology was probably the main factor in this pioneering performance. Nowadays, hard data researchers (such as epidemiologists) through the need of using more complex design models, matching quantitative and qualitative methods, are prone to identify the usefulness of epistemological analysis of their 'hard' data.

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