Background and Aims: Brazil is the largest consumer of pesticides in the world and is highly dependent on agricultural production for economic sustainability. Agricultural workers and their families are at an increased risk of suffering from pesticide related illnesses due to their frequent exposure to these chemicals. Women are at an even greater risk and have been noted to suffer from reproductive health disorders and poor pregnancy outcomes resulting from pesticide exposure. This study examined the risk perceptions women had related to their occupational pesticide exposures, focusing on attitudes, behaviors, and knowledge.

Methods: This study focused on two rural communities of Rio de Janeiro State, Brazil. Rapid assessment procedure techniques were applied and a combination of questionnaires, a focus group, and toxicology exams were used to obtain data. Content analysis techniques were used to assess the results.

Results: Three themes were identified as influencing women’s risk perception to pesticides: 1) invisibility of risks - women do not understand the risks involved in their work; 2) minimization of risks – some women understand there are a few risks involved in their work, however, they fail to understand the degree of harm and neglect major health risks; 3) women take on defensive strategies - even after knowing there is a risk present and understanding how harmful that risk can be, they deny there is any risk involved in order to continue working. Additionally, women did not associate their work with poor reproductive health and birth outcomes that they or other women in their community experienced.

Conclusions: Our study indicated that women do not attribute many of their work behaviors to poor reproductive and birth outcomes, or other health problems. This leads to the need for developing effective risk communication tools and incorporating risk perception studies to epidemiological and health situation analysis.