Introduction Bees produce a large number of products that contain bioactive constituents like honey, propolis, royal jelly, bee pollen, beeswax, and bee venom, which have been used by different civilizations for centuries to treat various illnesses (Al Naggar et al., 2021).In vitro and in vivo studies as well as clinical trials have shown that bee products can be indicated to treat various diseases and for the health balance and homeostasis (Kwon et al., 2001; Zhu and Wongsiri, 2008; White and Nezvesky, 2009; Jull et al., 2015; Tasca et al., submitted).The PubMed database (https://PubMed.ncbi.nlm.nih.gov/) was used to assess the therapeutic studies involving bee products, searching for the biological activity of each bee product.Moreover, due to their nutrients, the consumption of bee products as nutraceutical and dietary supplements has increased (Pasupuleti et al., 2017; Al Naggar et al., 2021).In an attempt to bridge the gap between beekeepers, apitherapists and the scientific evidence of research on bee products, we aimed at analyzing the practice of apitherapy globally and combine traditional knowledge with the scientific evidence.Thus, this review aimed to discuss scientific research based on studies carried out in vitro using different cell cultures, and in vivo studying mice, rats or other experimental ..animals