A knee is the most complicated joint in our body. It is commonly injured during volleyball, mainly resulting as a knee pain syndrome or an acute rupture of an anterior cruciate ligament. In its theoretical part this bachelor thesis gives an overview of basic anatomy and biomechanics of the knee joint, it deals with the gender differences in morfology and neurophysiology and it contains a chapter dealing with biomechanics of the knee joint in volleyball. The second part of this bachelor thesis is a research study searching for the most common knee injury in volleyball, comparing differences among men and women and comparing differences between indoor and beach volleyball. The most quoted injury of the knee joint was the injury of the ligament, but as the most serious and the most common injury players named an overuse injury. We didn't manage to compare an incidence in indoor and beach volleyball due to the lack of data. We didn't find a significant difference in the incidence and a character of injuries among men and women.