

## **Scoliosis Effect towards of Incidence of the Secondary Osteoarthritis on the Knee in Athletes at the National Sports Cibubur Hospital on July 2013-April 2014**

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**Abstract :** Osteoarthritis of the knee can occur due to scoliosis. The purpose of this study is to determine the effect of scoliosis cause secondary osteoarthritis on the knee. This research use an analytic cross-sectional design. The total sample of 92 athletes scoliosis taken by simple random sampling technique. The data obtained were analyzing with Chi-square test, Fisher and Prevalence Ratio. The results of analysis show that there are influences on the incidence of scoliosis secondary osteoarthritis on the knee in athletes at the National Sports Hospital. Based on the criteria in the Cobbs angle had the results ( $p = 0.022$  ( $p < 0.05$ )), moderate Cobbs angle degree were 7.5 times more at risk of causing secondary osteoarthritis on the knee than a mild degree. While the shape of the curve scoliosis is getting results ( $p = 0.038$  ( $p < 0.05$ )), the shape of the S curve scoliosis 3.2 times more at risk of causing secondary osteoarthritis on the knee than the curve C. It can be concluded that there is significant influence between the Cobbs angle, shape of the curve scoliosis on the incidence of secondary osteoarthritis on the knee in National Sports Cibubur Hospital on July 2013- April 2014

**Keywords :** Cobbs angle, curve shape scoliosis, secondary osteoarthritis on the knee, analytic cross-sectional design

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