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| TITLE | The effect of FIFA 11+ as an injury prevention program in youth futsal players |
|  | **Background:** Futsal is a high risk sport, especially in youth level. But none has studied the application of *FIFA 11+*, the football injury prevention program among youth futsal players in Indonesia.    **Objective:** To determine the effectiveness of *FIFA 11+* in improving physical fitness components affecting injury risks among youth futsal players.    **Design:** This experimental study was recruiting two groups of youth futsal players by doing purposive / judgmental random sampling to the senior high school futsal teams in Yogyakarta, Indonesia.    **Setting:** High school futsal league.    **Patients (or Participants):** The subjects were high school students participating in the school futsal team. From the total of 28 subjects (15 subjects in the experiment group and 13 in control group), 8 subjects were dropping out, leaving 9 subjects in the experiment group and 11 in the control group for the final analysis.    **Interventions (or Assessment of Risk Factors):** The experiment (EXP) group underwent *FIFA 11+* training twice per week for four weeks while the control (CON) group underwent routine futsal training. Both groups performed physical fitness tests before and after the intervention. Changes in performance (pre- vs. post-intervention) for each group were analyzed using dependent t-test (p < 0.05). Change in performance of each group were compared using independent t-test (p < 0.05).    **Main Outcome Measurements:** Core strength (evaluated using plank test), leg power (vertical jump test) and agility (Illinois agility test).    **Results:** The core strength (*p* = 0.007) and agility (*p* = 0.01) of the EXP group increased significantly, while no change were observed in the CON group. The increase of agility in EXP group was found to be significantly different compared to the one in CON group (*p* = 0.039).    **Conclusions:** *FIFA 11+* can improve certain physical fitness components that contribute in preventing injury. Thus it is recommended to add *FIFA 11+* to the routine futsal training as an injury prevention program.  **RESULT TABLE :**   |  |  |  |  | | --- | --- | --- | --- | | **Characteristics** | **Experiment** | **Control** | ***p*** | | **Age (year)** | 16 (15-16) | 17 (15-18) | 0.02 | | **BMI (kg/m2)** | 19.73 + 2,44 | 21.08 + 2,04 | 0.195 |  |  |  |  | | --- | --- | --- | | **Group** | **Tanner *stage*** | | | *Stage* IV | *Stage* V | | **Experiment (n= 9)** | 3 | 6 | | **Control (n= 11)** | 3 | 8 |   No significant difference in Tanner maturity rating between EXP and CON groups (Fischer test *p*=1.00)  http://www.ioc-preventionconference.org/online-services/wp-content/plugins/gange/absimages/ABSIMG_1383323212_148.png |