Follow up visits in either primary care (HORUS® Application) or emergency settings (CAJAL® Application) were analyzed, regardless of the main complain at admission, and the data was collected from this records.

**Results:** Between 2012 and 2016, 68 joint knee punctures and 49 periarticular shoulder punctures were performed in dabigatran patients. Of the 117 procedures, 78 (66.6%) were performed by attending physicians in Traumatology, Rheumatology or Physical Medicine and Rehabilitation, and the rest by internal medicine residents.

Of the 68 knee arthrocentesis, in 48 (70.5%) of the cases synovial fluid collection and infiltration were performed, while in the rest only infiltration was needed.

Of the 49 shoulder punctures, in 12 (24.4%) a bursocentesis was performed while in the rest only an infiltration was done.

16 knee and 17 shoulder punctures (23.5% and 34.6%) were ultrasound assisted procedures.

Among the patients with knee puncture, 11 (16.1%) came back before 15 days due to procedure related symptoms. Of these, 9 did so because of persistence of the main symptom or persistent pain and 2 because of increased pain. These two patients were studied sonographically and one of them had a hemarthrosis that was treated conservatively.

In the group of patients with shoulder puncture, 7 (14.2%) came back before the first 15 days and in all of them the cause was persistence of the main symptom. None of the patients required admission at the hospital. None of the patients with ecography-assisted procedures came back before the first 15 days.

No patient consulted due to bleeding after the first fifteen days. (There were no hemarthrosis cases after the fists 15 days). The outcome of the procedure was not influenced by the person performing it (attending vs resident), however, all the echocardiographic procedures were performed by an attending.

**Conclusions:** Although it is a small population, this is to the best of our knowledge, the biggest published serie of dabigatran anticoagulated patients who underwent a large joint or periarticular puncture. We can conclude that this type of punctures are safe in patients with this characteristics. On the other hand, there is evidence that ecography-assisted procedures are more effective in this group of patients.

**Disclosure of Interest:** None declared

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## SAT0586 RELATIONSHIP BETWEEN CORE STABILIZATION AND LOW BACK PAIN IN YOUNG PEOPLE

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**Background:** Low Back Pain (LBP) is a very common health problem that affects people of all ages. It has been observed that the increase in lumbar stabilization is effective in reducing back pain risk. A combination of local and global stability system is used to describe to core stability which is a key factor for enhancing lumbar stabilization. Exercise training focused on these groups of muscles could contribute to pain alleviation and spinal functional improvement.

**Objectives:** The aim of the study was to define relationship between core stabilization and low back pain in young people who were suffering from low back pain.

**Methods:** 290 individuals (144 male, 146 female), between 18 and 25 years of age were included in this study. Disability arising from low back pain was identified by using the Oswestry disability index, consisting of 10 questions with 6 choices (0–5 points for each question). The higher score is associated with more low back pain. The period of core stabilization was determined using Plank test in which the body is stand flat from shoulder to heels on foot and forearm and Side Plank test in which sitting on the forearm and standing on one side of the body with the legs parallel and the feet perpendicular and the body is held flat from the shoulder to the heels. The duration of ability to maintain Plank test was measured by a chronometer. Spearman correlation test used for statistical analyzing.

**Results:** In this study, the average of Plank test duration was 76.9±44.2 (sec), while the mean of the Side Plank test duration was 43.9±28.2 (sec) and Oswestry disability index total score was 6.3±5.5. A weak negative correlation was found between the Plank test and the Oswestry disability index (p=0,03; r =-0,111). And negatively correlated between the Side Plank and the Oswestry disability index (p>0.05). On the other hand, there was a positively modarate correlation between the Plank test and the Side Plank test (p=0,00; r =0,656). There was a weak negative correlation between age and Oswestry disability index (p=0,014; r =- 0,151).

**Conclusions:** Results of the study indicated that increasing the duration of stabilization reduces the low back pain. For this reason, core muscles deserve a great deal of interest in order to reduce the problem of low back pain which is common among young population.

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## SAT0587 SCHOOL BAGS WEIGHT ARE NOT ASSOCIATED WITH LOW BACK PAIN IN SCHOOLCHILDREN IN CAMEROON

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**Background:** Data are mixed on the role of school bags in the occurrence of low back pain in pupils.

**Objectives:** Thus, we carried out this study with the aim to determine if the school bags were a factor associated with low back pain in Cameroonian schoolchildren.

**Methods:** We performed a cross-sectional study between December 2015 and April 2016 in 10 primary schools of the city of Douala, Cameroon. A questionnaire was submitted to the students of these different schools. Informed and signed consent of their parents were obtained. Sociodemographic and clinical data were collected, as well as the weight of each school bags. A p<0.05 was significant.

**Results:** We included 1075 pupils (543 boys, 532 girls). The mean age was 11±1 years (8–16 years). BMI was normal in 928 children (86.5%). The prevalence of low back pain was 12.3% (132 children: 81 girls and 51 boys). Sixteen children had already met a physician for low back pain.

The mean weight of the school bag was 4.9±1.9 kg, with 369 children (57.7%) with a school bags weight ≥15% of their body weight in private schools compared with 56 (12.9%) in public schools. We had 99 children with low back pain with a school bag weight ≥10% of their body weight (Table 1). We didn't find any relationship between low back pain and the weight of the school bag, regardless of gender, BMI, age of pain, type of school, distance from home to school, way of transportation, and age (p>0.05). However, the exception was found in girls aged from 8 to 10 years with a school bag weight >15% of their body weight (p=0.05). Furthermore, in univariate analysis, factors associated with low back pain were (p<0.05): age, history of low back pain in at least one parent, competitive sport, a bad seated position on school benches. In multivariate analysis, factors associated with low back pain were female, competitive sport, and low back pain in at least one parent (Table 2).

Table 1. Relationship between weight of school bag and body weight of pupils with low back pain (n=132)

| Weight of the school bag in relation to the weight of the child | Number of pupils, n (%) | *p* |
|---|---|---|
| <5% | 3 (5,5) | – |
| 5–10% | 30 (11,7) | 0,09 |
| 10–15% | 46 (13,6) | 0,10 |
| >15% | 53 (12,5) | 0,19 |

Table 2. Factors associated with low back pain in children

| Variable | OR | 95% CI | *p* |
|---|---|---|---|
| Age | 0.93 | 0.81–1,06 | *0.25* |
| Sex | 1.73 | 1.19–2,52 | *0.004* |
| Competitive sport | 1.61 | 1.03–2.53 | *0.038* |
| Low back pain in parents | 1.88 | 1.23–2.89 | *0.004* |

**Conclusions:** The weight of the school bags was not associated with low back pain in Cameroonian schoolchildren (except for girls aged from 8 to 10). However, female, competitive sport and low back pain in at least one parent were associated to low back pain.

**Disclosure of Interest:** None declared

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## SAT0588 HEALTHCARE WORKERS ARE NOT MORE AT RISK TO LOW BACK PAIN THAN OTHER OCCUPATIONS

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**Background:** Low back pain is common among healthcare workers but is it more frequent than in other occupations?

**Objectives:** In order to answer this question, we carried out this study with the aim of determining if healthcare workers was more at risk for low back pain in the same institution than non-healthcare workers, administrative and technical workers.

**Methods:** We performed a survey on all permanent workers (n=584) of the Douala General Hospital in Cameroon from January to May 2016. Socio-demographic characteristics of workers (distinction with different occupations – healthcare workers, administrative workers, technical workers) and the main features of low back pain were collected. A p<0.05 was significant.

**Results:** Of the 584 questionnaires distributed, 474 responses were obtained (81.1%). We excluded 27 for incomplete data. 447 were retained for the final analysis: 296 healthcare workers, 79 administrative workers, and 72 technical workers. The mean age was 40±10 years [22–66 years] and 258 (57.7%) were female. Mean BMI was 27±4.3 kg/m$^2$ with 103 (23%) obese.

At the end of the study, 252 (56.4%) workers described low back pain, including 170 (57.4%) healthcare workers, 44 (55.7) administrative workers and 38 (52.7) technical workers. There was no significant difference between the different groups (p>0.05). Same for sex (p=0.9). The overall independent risk factors associated with low back pain were: seniority in their current position (OR 4.97, 95% CI 1.80–13.68, p=0.002), office chair quality (OR 3.06, 95% CI 1.29–7.26,