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Awareness of Knowledge About Importance of Good Sitting Posture For Students Among School Teachers

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ABSTRACT

Background: Proper sitting posture has become an increasing health issue, particularly in kids and teenagers. Many students spend long hours seated in classrooms without realizing that their academic performance and health may suffer as a result of bad posture. However, common habits like slouching, crossing legs, or excessive forward tilting can cause back, shoulder, and neck pain. Ergonomics, which involves designing environments and tools that support the body's natural position.

Materials and Method: A validated A survey was employed to gather accurate and reliable data from the participants. A consent form was provided to all participants to ensure voluntary participation and ethical approval. This was a survey-based study, aiming to gather information through responses from participants.

Result: The investigation was carried out among 76 school teachers in the Karad region to examine their understanding of the relevance of correct sitting posture for kids. The sample included 56.6% men and 43.4% women, with an average teaching experience of 15 years. The majority (72.36%) correctly identified optimal sitting posture as sitting erect with back support and feet flat on the ground.

Conclusion: Nowadays, maintaining proper sitting posture while studying is essential for students. Many spend extended hours in poorly designed chairs, carry heavy backpacks, or lack awareness about correct sitting habits. These factors can result in chronic back and neck pain over time.

KEYWORDS: Musculoskeletal health, Posture awareness, Students' health, Sitting posture.

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INTRODUCTION

Today, poor posture is a common issue, especially among young people. Learning to sit, stand, and move correctly can prevent back and neck pain. Doing at least 60 minutes of physical activity daily and building good posture habits can help 1,2,3. Students sit for long hours in classrooms, so having good posture is very important. It helps with their health, focus, and overall well-being 2. Many school children carry heavy backpacks every day, which can lead to back pain, neck pain, shoulder strain, and poor posture. All of this can lead to muscle and joint pain that often goes unnoticed 3,4. Many school kids carry backpacks that are too heavy, which can cause back, neck, and shoulder pain, tiredness, and bad posture. The extra weight throws off their body balance, affecting how they stand and walk 5. Teachers are crucial in assisting pupils in forming lifelong habits of proper posture. It's not only informing children to sit straight teachers also help create daily routines and classroom setups that support healthy sitting. A study in 2007 by Kratovo and her team looked at over 3,500 students aged 7, 11, and 15. Kids spend many hours sitting in classrooms, often in ways that hurt their bodies like slouching, crossing legs, or leaning forward to see the board. These habits can cause neck and back pain, tired muscles, numbness 6. It aims to find out if teachers know the benefits of proper posture, if they teach students about it, and whether they use any methods to encourage good posture in class. Youngsters with bad posture may have back pain, stiff necks, and even spine disorders like scoliosis 7. Research has looked at posture problems in kids aged 8 to 15, but we still don't know much about how aware children are of their own posture. Several studies have been carried out in Europe, Australia, and the US on how backpacks affect kids, but there's not much research from the Middle East 8. When parents buy backpacks, they usually look at how the bag looks or how heavy they frequently forget that it is to consider things like what the child is carrying, how the bag is worn, and whether it's comfortable. To prevent these problems, it's important to choose the right backpack, make sure it fits the child properly, and not overload it. Parents have a key role they should pick safe bags, watch how their kids use them, and check the weight regularly 10. Bad posture may be caused by daily behaviors including utilizing furniture that doesn't fit well, sitting for extended periods of time, and not exercising enough. One study found that half of the students had sticking-out shoulder blades, 32% had lower back pain, and 31% had rounded upper backs. Another study by Lata ski and his team looked at 380 children aged 14 and found that 14.7% had posture problems, and 30% had no idea they had them 11. This is where ergonomics helps. Ergonomics is about designing classrooms and furniture in a way that reduces strain on the body. With proper seating and setups, students can sit comfortably, which improves posture, focus, and overall well-being. Using ergonomic solutions can significantly impact in students' health and how well they do in school 9. How classroom space is used and how schools are constructed can have an impact on how students feel and act. How effectively the school is run is also correlated with these social and physical aspects. For example, students tend to feel better in safe, supportive spaces that

meet their needs. Things like having some privacy and enough room to move also make a difference 13. Bad sitting habits like slouching or crossing legs can lead to problems like back and neck pain, tired muscles, tingling, numbness, and lower focus or performance. The solution is ergonomics a field that focuses on designing furniture and spaces to reduce discomfort and strain. Ignoring posture and stress in the classroom can lead to ongoing injuries, low energy, poor learning, and even affect their future education 15. Another common problem though not always noticed is muscle and joint pain caused by bad sitting habits in class. This often happens because desks and chairs aren't designed properly, and there isn't enough space for kids to move around, which adds to their discomfort 12

SUBJECTS AND METHODS:

Participants' accurate and trustworthy data was gathered using a validated questionnaire. A consent document was given to all participants to ensure voluntary participation and ethical approval. This was a survey-based study, aiming to gather information through responses from participants. The study followed an observational design and A simple random selection technique was employed to equitably choose participants. The research was carried out in Karad.

Results: The study was conducted among 76 school teachers in the Karad region to examine their understanding of the relevance of correct sitting posture for kids. The sample included 56.6% men and 43.4% women, with an average teaching experience of 15 years. Half of the respondents taught primary grades, while the other half taught secondary grades. The majority (72.36%) correctly identified optimal sitting posture as sitting erect with back support and feet flat on the ground. An overwhelming 98.68% of teachers recognized the significance of excellent posture for pupils, noting benefits such as lower risk of long-term health issues (39.47%), greater focus (34.2%), and prevention of back and neck pain (19.73%). The majority of teachers (97%) reported teaching pupils about posture, and 81.57% recognized all the elements of appropriate sitting. Inadequate classroom furnishings (42.1%) and a lack of teacher awareness (34.21%) were among the obstacles to fostering proper posture. Notably, 90.78% of participants believed that posture education ought to be incorporated into the school curriculum, and 81.57% admitted to following ergonomic recommendations personally.

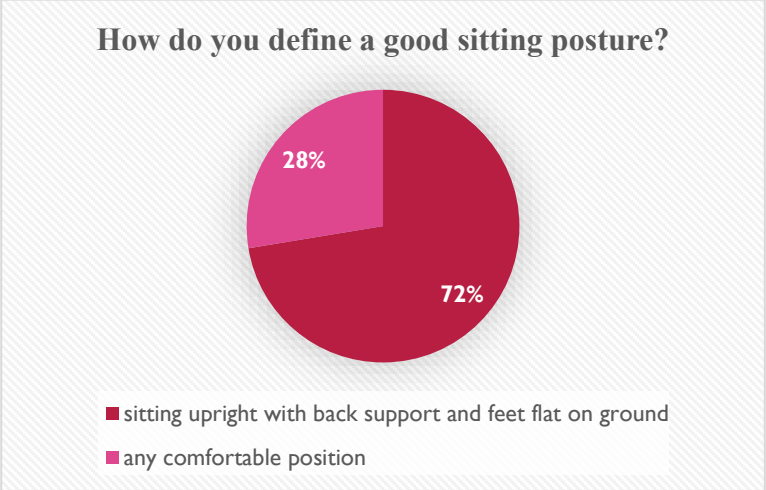

Figure 1 Interpretation of Figure 1

The graph indicates that 72% of the participants think that sitting upright with back support and feet flat on ground is a good sitting posture, while 28% think that any comfortable position is a good sitting.

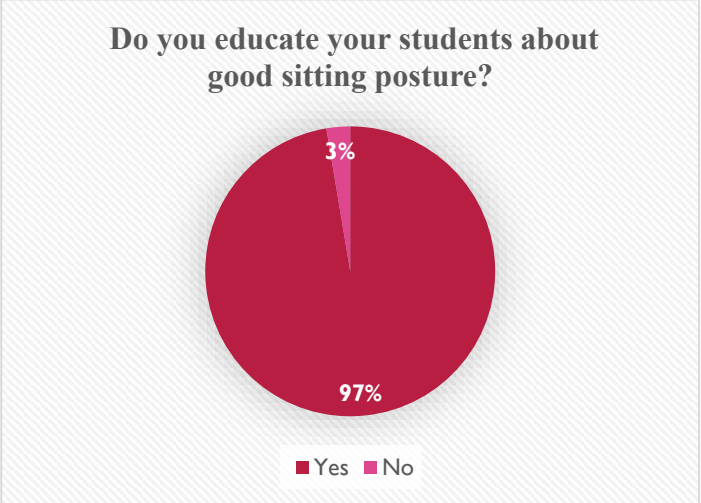

Figure 2 Interpretation of Figure 2

According to the graph large majority of respondents, 97%, claimed that they do teach their pupils how to sit properly.Only 3% said they do not.

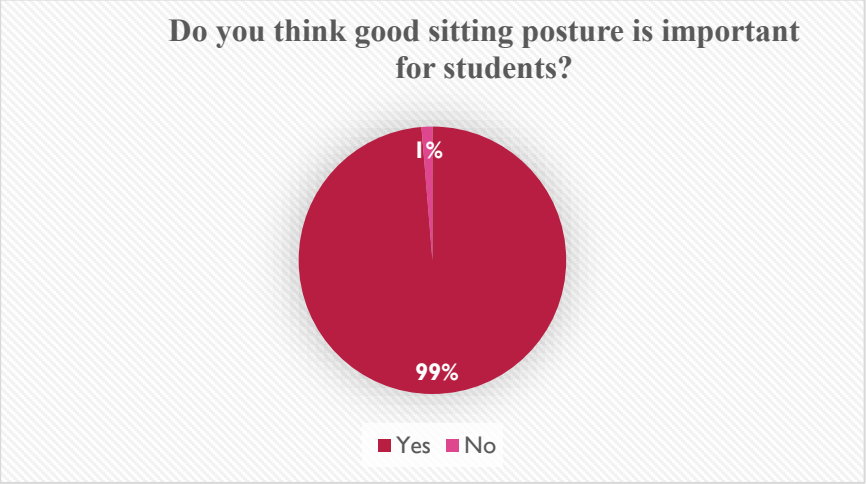

Figure 3 Interpretation of figure 3

The graph highlights how important proper seating posture is for pupils, with 99% saying "Yes" and only 1% saying "No." This indicates a strong awareness of how posture affects students health and learning.

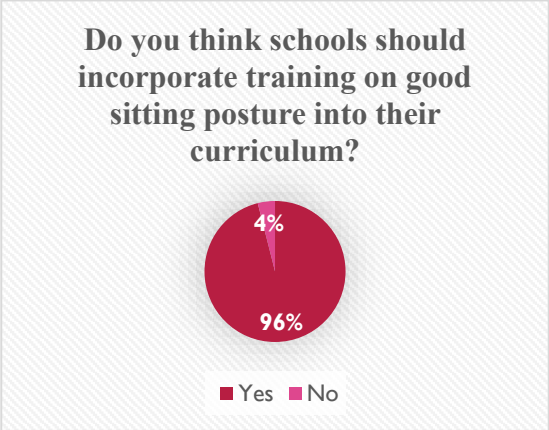

Figure 4 Interpretation of Figure 4

The graph shows that 96% of the respondents believe schools should include training on good sitting posture in their curriculum, while only 4% disagree.

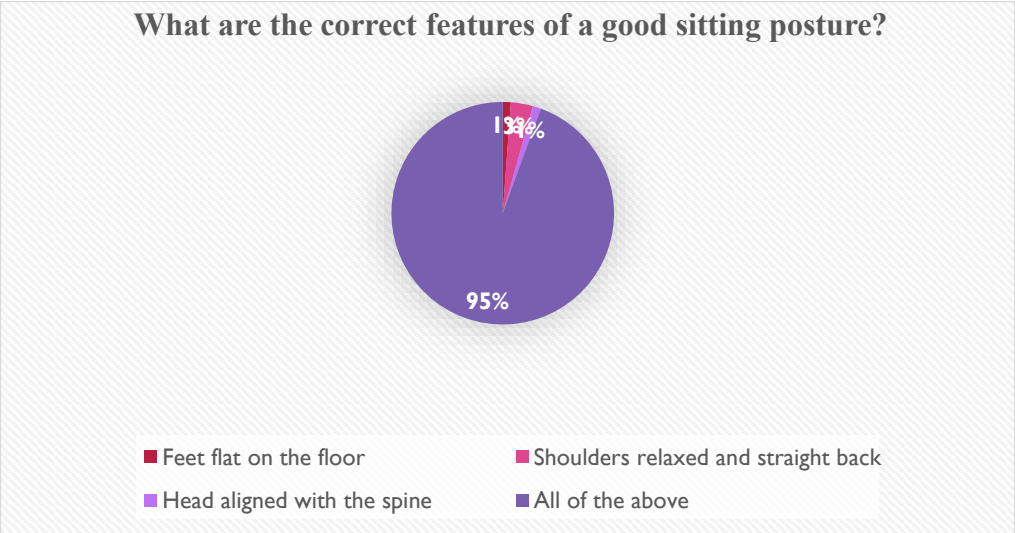

Figure 5 Interpretation of Figure 5

The graph shows that 95% of respondents think that every thing on the list is level on the ground, shoulders relaxed and back straight are important for good sitting posture. Only a small percentage chose individual options: 1% picked feet flat on the ground, 3% selected relaxed shoulders and straight back, and another 1% said head aligned a with the spine.

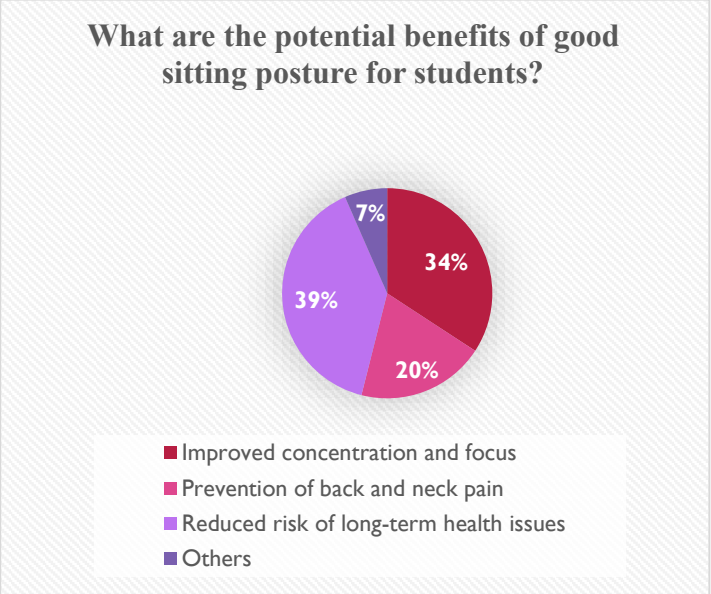

Figure 6 Interpretation of Figure 6

According to the graph,the largest portion, 39%, believes that maintaining a good posture helps reduce the risk of long-term health problems. About 34% think it improves students' concentration and focus, showing that many recognize the link between posture and learning performance. Meanwhile, 20% say it helps prevent back and neck pain, pointing to immediate physical health benefits. A small percentage, 7%, mentioned other benefits.

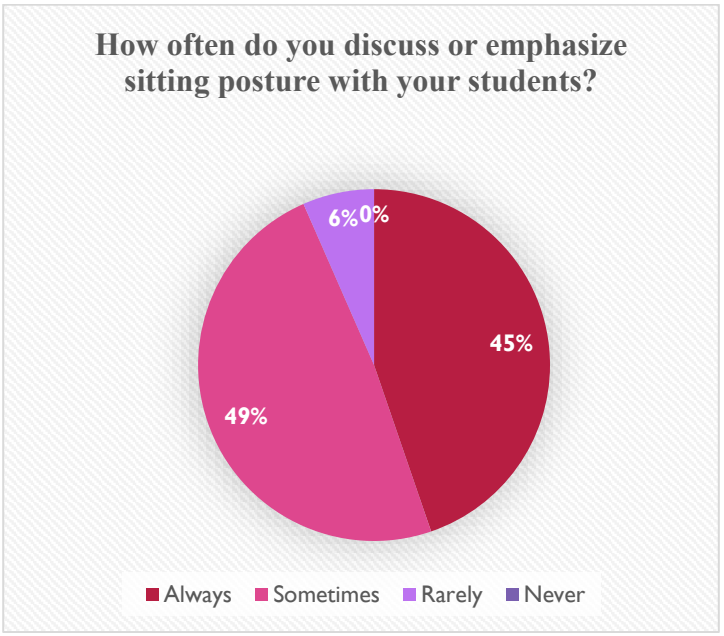

Figure 7 Interpretation of Figure 7

The graph shows how often teachers talk to their students about sitting posture. Around 49% of the respondents said they "sometimes" discuss it, while 45% said they "always" do. A small number, 6%, said they "rarely" talk about it, and no one chose "never."

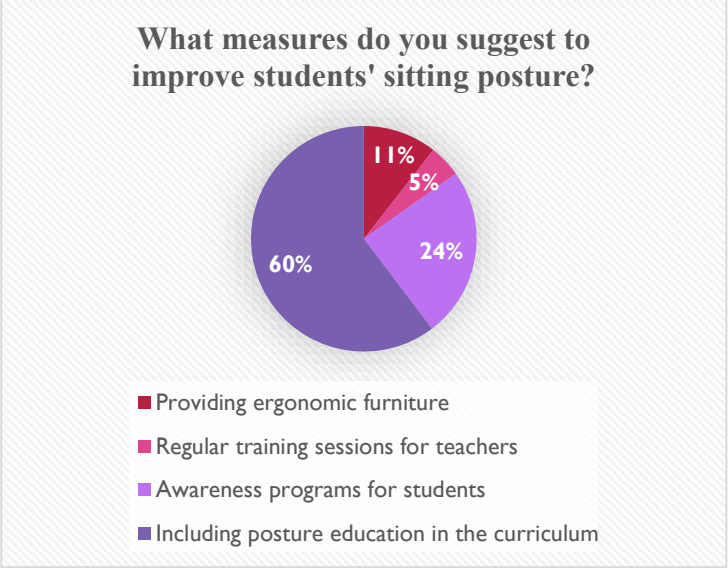

Figure 8 Interpretation of Figure 8

This chart shows suggestions made by respondents to improve students' sitting posture. The majority, 60%, believe that including posture education in the school curriculum is the most effective step. Around 24% suggest creating awareness programs for students, while 11% recommend regular training sessions for teachers. Only 5% think providing ergonomic furniture is the solution.

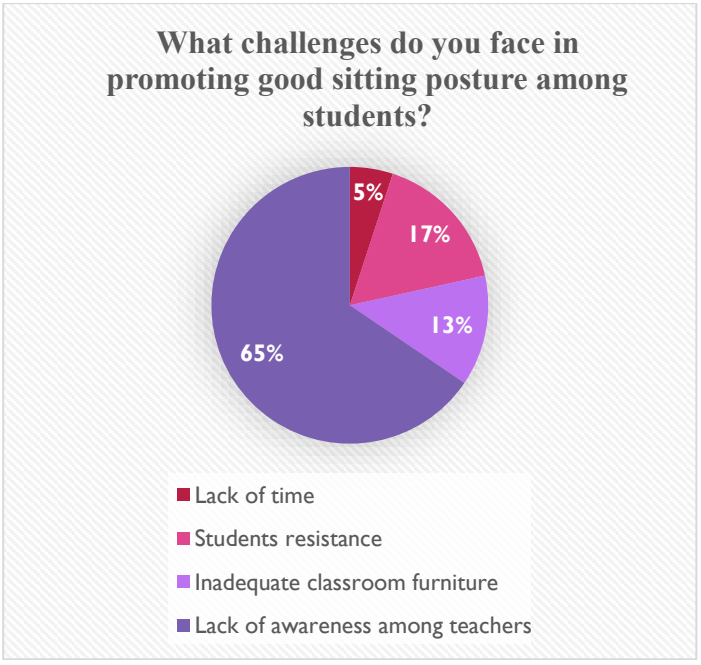

Figure 9 Interpretation of Figure 9

The graph show of biggest issue, according to 65% of respondents, is a lack of awareness among teachers themselves. This is followed by 17% who feel students resist following proper posture, and 13% who draw attention to the classroom's shortcomings furniture makes it difficult. Only 5% mentioned absence of time as a challenge.

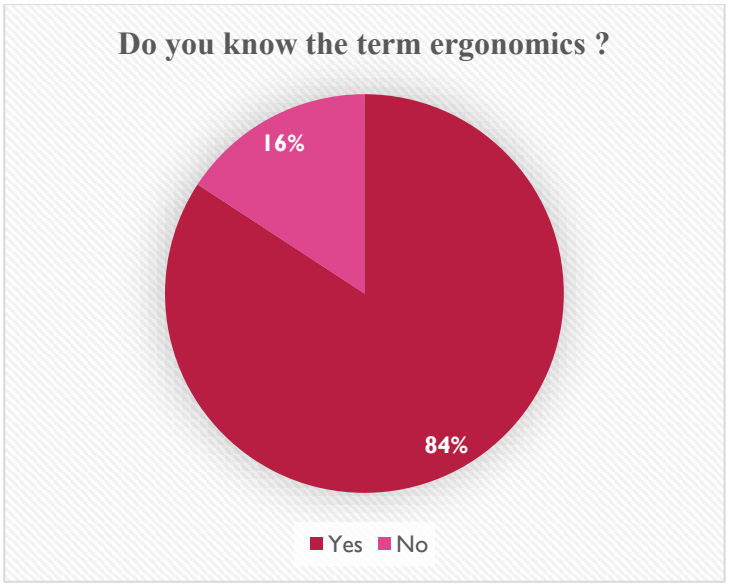

Figure 10 Interpretation of Figure 10

The graph shows that a large majority of people 84% are familiar with the term "ergonomics," while 16% are not. This suggests that the majority of responders are somewhat knowledgeable in ergonomics.

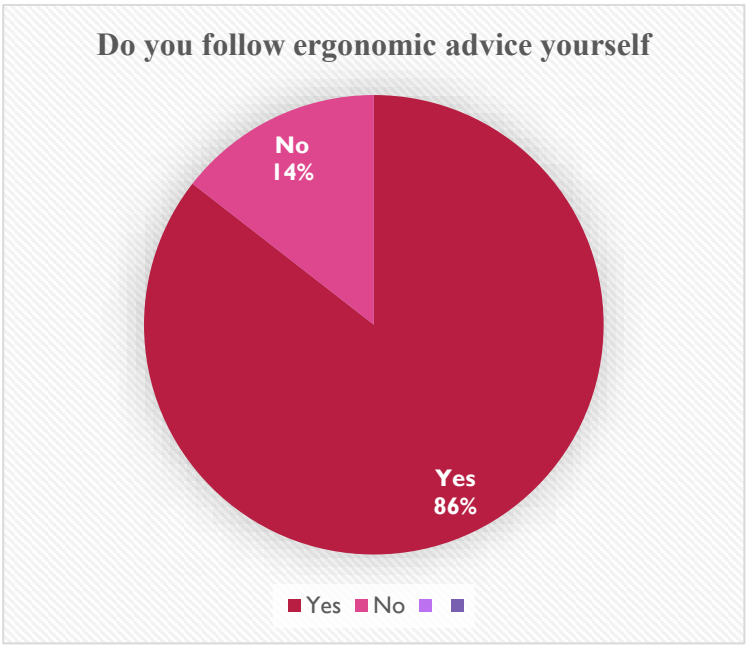

Figure 11 Interpretation of Figure 11

This graph illustrates whether or not people adhere to ergonomic recommendations. Just 14% of respondents acknowledged not practicing ergonomic habits, compared to 86% who said they do.

Figure 12 Interpretation of Figure 12

The answers to the issue of whether educators have been trained to promote proper sitting posture are displayed in this chart. 57% of respondents claimed to have had such training, although 43% claiming not to have.

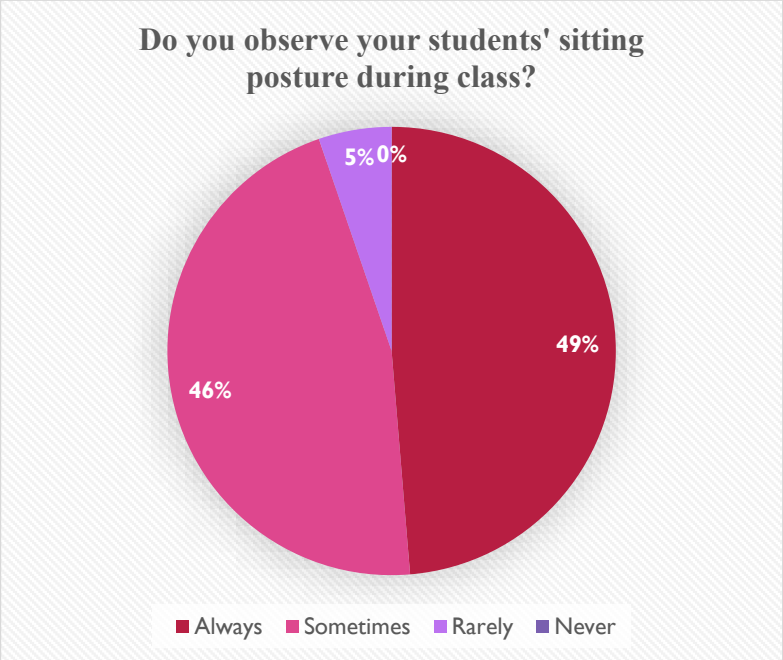

Figure 13 Interpretation of Figure 13

The frequency with which professors observe their pupils' seating posture during class is depicted in this graph. Most responders can be divided into two categories: While 46% of teachers said they occasionally check their pupils' posture, 49% of teachers said they always do so. None of the participants were selected at all, and just 5% of respondents claimed to check their posture infrequently.

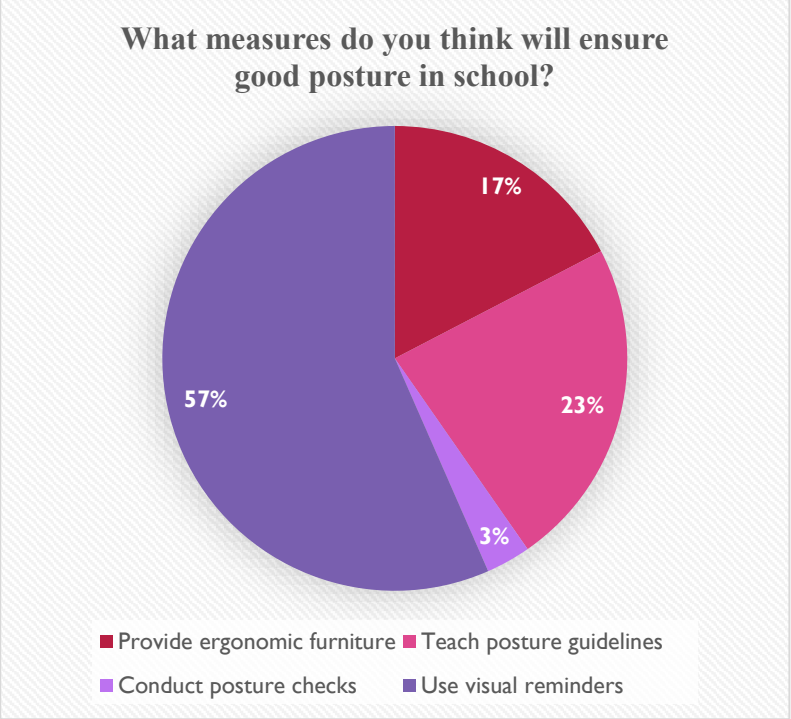

Figure 14 Interpretation of Figure 14

The steps instructors believe might help preserve proper posture in schools are depicted in the pie chart. 57% of respondents thought that using visual reminders was the most effective tactic. While 17% proposed providing ergonomic furniture, while 23% urged teaching posture rules. Just 3% stated that the most crucial step was to perform posture assessments

DISCUSSION:

The present study assessed the awareness and practices of school teachers in the Karad region regarding correct sitting posture for children. The results show that instructors typically displayed a high degree of awareness about the significance of posture and its impact on children's health and learning. A majority (72.36%) correctly identified the optimal sitting posture, and nearly all participants (98.68%) acknowledged its importance, citing health-related and cognitive benefits. These findings imply that educators recognize the preventive role of posture in reducing musculoskeletal discomfort and its influence on concentration and academic performance, which is in line with earlier research that highlight the link between ergonomics and student well-being (Grimes & Legg, 2004; Cardon et al., 2007). [16,20]

Most teachers (97%) stated that they instruct their students about correct sitting posture, with nearly half doing so consistently. This is an encouraging finding, as teachers serve as role models in shaping healthy classroom behaviors. However, Additionally, the findings showed that not all teachers were fully aware of every component of proper posture, with 18.43% failing to recognize essential elements such as flat feet, relaxed shoulders, and spinal alignment. Previous research has similarly demonstrated that while teachers may acknowledge the importance of posture, their detailed understanding of ergonomics remains limited (Dockrell et al., 2012). This highlights the requirement for organized training courses to equip teachers with comprehensive ergonomic awareness. [17]

Barriers identified in the study particularly inadequate classroom furniture (42.1%) and limited teacher awareness (34.21%) are noteworthy. These results are consistent with earlier research indicating that poorly designed school furniture contributes to improper sitting postures and increases the risk of musculoskeletal problems among children (Parcells et al., 1999; Milanese & Grimmer, 2004). [20,22,23] Even when teachers are motivated, environmental constraints and insufficient professional development could restrict their capacity to enforce correct posture.

One significant conclusion was that over 90% of participants said posture instruction need to be taught in schools. This suggests strong support for systemic interventions, where posture education is not dependent solely on individual teacher efforts but integrated into the broader educational framework. Similar suggestions have been made in studies emphasizing the role of schools in fostering preventive health behaviors among children (Macial-Malaquias & Coury, 2011). [21]

Furthermore, while 84% of teachers were familiar with the concept of ergonomics and 81.57% reported following ergonomic practices themselves, 43% had not received formal training. This gap between awareness and training highlights an important area for improvement. Previous research has indicated that ergonomics education for teachers can significantly improve the quality of posture-related instruction provided to students (García-Acosta & Lange-Morales, 2007).[19]

Additionally, educators in this study offered useful tactics for enhancing posture education, including curriculum inclusion, awareness programs, visual reminders, and teacher training. The preference for low-cost, behavior-focused interventions is in line

with previous research that behavioral strategies, such as visual cues, are effective in promoting sustained ergonomic practices in classroom environments (Dockrell et al., 2015).[17]

Overall, the findings demonstrate that while teachers understand the significance of correct sitting posture and are largely willing to promote it, barriers related to training and infrastructure must be addressed. Incorporating posture education into the school curriculum, supported by ergonomics training for teachers and improvements in classroom design, may provide a sustainable way forward.These actions could lessen the risk of musculoskeletal issues among students, enhance their concentration, and contribute to overall health and learning outcomes..

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