

Locomotors Effects Among Manipuri Tablist

Bachaspatimayum Devkumar Sharma¹, Prof. Rajkumari Sujata Devi²

¹Research Scholar, Department of Performing Arts, Manipur International University

²Professor, Manipur International University

ABSTRACT

Introduction: Playing a percussion instrument demands great force and effort, which may make percussionists prone to playing-related locomotors effect. Tabla is one of the most popular percussion instruments in Northern India. Playing Tabla, like any other musical instrument, can potentially lead to locomotors effect due to the repetitive motions and prolonged periods of sitting. Tabla players must navigate the delicate balance between artistic pursuit and self-care.

Objectives: The main objective of the study is analysing various locomotors effect encountered by Tabla players and to find out the most common among them along with the suggestion for precautionary measures to be taken up by the Tabla players.

Methodology: The present study has been conducted through participant approach of observation along with questionnaire method to be collected from 30 Tablists working or retired from different Institutions, Colleges, and their students. The collected data have been analysed using descriptive statistics.

Results: It has been found out the result that majority of the Tabla players have sometimes encountered locomotors effect on Back, Shoulder, Neck, Arms, Wrist, Fingers, and knees which are the most commonly involved areas, it can lead to long-term health issues if not addressed proactively.

Suggestions: Educational initiatives, workshops, and resources that address proper technique, warm-up exercises, and massage therapy, injury prevention strategies can equip Tabla players with the knowledge and tools to safeguard their physical health.

Conclusion: In the conclusion this study underscores the need for proactive measures to safeguard the health of musicians in the Tabla community, ensuring their continued enjoyment and success in their musical pursuits. It cannot be ignored to have locomotors effect among the Tablists. Regular physical, manual and massage therapies are required for avoidance of such discomforts by the Tablists in order to enhance their prolong performance.

Keywords: Tabla, Percussionists, Manipuri Tablist, locomotors effect, Therapies

INTRODUCTION:

Tabla is a traditional percussion instrument belonging to the North Indian heritage. Tabla nowadays is also played with different genres of music and also great deal of importance in the accompanist of dance, especially in North Indian dance kathak, it is popularly use for accompanist. Along with that, there are many regional Vocal styles where Tabla is used. It is a very important percussion instrument that is indispensably associated with Classical music, Light music, Thumri, Tappa, Ghazal, Bhajan, Folk music, etc. From the early times the Tabla has been a popular musical instrument loved by people in different countries of the world not only in India.

Playing a percussion instrument demands great force and effort, which may make percussionists prone to playing-related locomotor effect. Like any other musical instrument, playing the Tabla can cause musculoskeletal pain because of the repetitive actions and extended sitting. The delicate balance between self-care and creative activities must be achieved by Tabla players. It is an essential part of many musical performances, from traditional interpretations to modern creations, because of its expressive range and rhythmic flexibility. Nonetheless, the physical strain that extended and complex Tabla playing places on players can cause musculoskeletal pain. Even with its cultural and artistic importance, little is known about the possible health effects of playing the Tabla, especially in relation to Manipuri music tradition. Understanding the impact of Tabla playing on the musculoskeletal health of practitioners is crucial for several reasons. First of all, since Tabla players frequently put in long hours to perfect their art, it challenges their occupational health and overall well-being. Tabla players can continue their artistic endeavours and preserve traditional musical history by acknowledging and decreasing any discomforts and injuries related to the instrument. Further research on this issue fosters improvements in musician-centric design principles and pedagogical approaches by reflecting the ergonomic factors present in musical instrument design and performance techniques. **According to Meikam and Khangembam (2022)** Manipur is a land gifted with rich artistic culture and traditional heritage. It can be said that introduction of Tabla in Manipur was due to the advent of Hindustani Music in Manipuri society. The Development of Hindustani classical vocal Music had taken place during the reign of Maharaja Chandrakirti. There are many Tablists in Manipuri society who play both Classical music as well as Manipuri Modern music (Popular Music). The art of playing the Tabla, an integral component of traditional music in Manipur, not only embodies cultural heritage but also represents a profound physical and artistic engagement. Amidst the rhythmic cadence and melodic favour, Tabla players face a hidden challenge—the risk of locomotor effect incurred during their performance.

In the time of Maharaj Chandrakirti, the institute was highly developed. Many forms of art i.e. Marabak Jagoi (Kathak), Hindustani Sangeet, Tabla, Pakhawaj, Violin, Accordion, Esraj, etc. were added. **Adhikarimayum (2023)**

REVIEW OF RELATED LITERATURES:

Mishra, W, (2013) conducted a study investigating PRMDs and associated risks among Tabla players. They found that a significant percentage of Tabla players experienced musculoskeletal discomforts, particularly in the upper limbs and back. The study highlighted the need among the Tabla players for awareness and preventive measures to address these issues.

Gohil, k, Sheth, M., & Vyas, Ne, (2016) conducted a study to determine the prevalence of PRMDs among musicians in general, including Tabla players. They found that PRMDs were quite common among musicians, with a higher prevalence in professional Tabla players compared to amateurs. The study also identified specific risk factors contributing to the development of PRMDs among the musicians, such as duration of practice and playing techniques.

Jani and Afle (2018) conducted a randomized controlled trial to investigate the effect of conditioning physiotherapy exercises on Tabla playing-related wrist pain in young Tabla learners. The study found that specific exercises targeting the wrist of Tablist could alleviate pain and could help them for longer practice and improve their performance outcomes.

Mishra, W., De, A., Iqbal, R., Khanzode, V., Gangopadhyay., & Chandra, A.M, (2018) further explored the agony experienced by Indian percussionists, including Tabla players. They discussed the

physical and psychosocial challenges faced by these musicians and the need to emphasize the importance of implementing ergonomic interventions to improve their well-being by the musicians.

Wijisman and Ackermann (2019) examined the education of Australian musicians and the role of ergonomics. Although not specific to Tabla players or Indian musicians, the study emphasized the need for including ergonomic principles and practices in music education to support musicians' health and well-being.

Patel and Rajput (2020) examined the prevalence of musculoskeletal disorders (MSDs) and their correlation with core endurance and body mass index (BMI) among Indian classical musical instrument players, which included Tabla players. The study highlighted the importance of physical fitness and BMI in mitigating the risk of MSDs in musicians.

Rotter, G., Noeres, K., Fernholz, I., Willich, S.N., Schmidt, A., & Berghofer, A, (2020) conducted a systematic review specifically focusing on musculoskeletal disorders and complaints in professional musicians. The review identified prevalence rates, risk factors, and treatment effects for various musculoskeletal conditions. Although not specific to Tabla players, the findings provide insights into the broader context of PRMDs among professional musicians such as Tablists, Pakhawaj, Mridangam, Drummers, Sitar, Sarod, Violin etc.

Mathew, A.A., Ferzana, S.M., Suresh, T.N., & Veeragoudhaman, T.S, (2022) developed a valid tool to assess PRMDs among amateur and professional musicians. While not specifically focused on Tabla players, their study highlighted the importance of reliable assessment tools for capturing the impact of PRMDs on musicians' well-being accurately.

Rodríguez, G, Noeres, K., I., Willich, S.N., Schmidt, A., & Berghofer, A, (2023) conducted a systematic review on musculoskeletal pain in musicians, including Tabla players. The review synthesized findings from various studies and identified risk factors associated with musculoskeletal pain. While the focus was not exclusively on PRMDs, the review provided a comprehensive understanding of musculoskeletal issues among musicians in various fields of performing arts.

STATEMENT OF THE PROBLEM:

The proposed research problem is entitled “**LOCCOMOTORS EFFECT AMONG MANIPURI TABLIST**”. Playing the Tabla is a physically demanding art that requires repetitive movements, sustained postures, and precise coordination. While locomotors effect is a well-documented issue among musicians globally, percussionists, including Tablists, are particularly vulnerable due to the nature of their playing technique. In Manipur, the cultural significance of the Tabla remains strong, with many performers dedicating years to mastering the instrument. However, anecdotal evidence and preliminary observations suggest that many Manipuri Tablists experience various forms of locomotors effect—ranging from wrist pain to lower back strain—which may affect their performance quality and long-term health. Despite the increasing interest in musicians' occupational health, there is a noticeable lack of systematic research on the physical health of Manipuri Tablists. No substantial data exists on the prevalence, causes, or coping strategies associated with musculoskeletal issues in this group. This knowledge gap not only limits awareness among Tablists themselves but also hinders the development of preventive measures and ergonomic interventions.

Therefore, this study aims to investigate the prevalence, severity, and contributing factors of locomotors effect among Manipuri Tablists, with the goal of informing targeted health strategies and improving their quality of life and performance longevity.

OBJECTIVES OF THE STUDY:

The study strives to achieve the following main objectives:

1. To analyse various locomotors effect encountered by Tabla players in Manipur.
2. To find out the most common locomotors effect among Manipuri Tablists.
3. To provide suggestion for precautionary measures to be taken up by the Tabla players to avoid locomotors effect

DELIMITATIONS OF THE STUDY:

The present study is confined to the students, and teachers of different Institutions, Colleges, and Universities such as Shri Shri Bal Mukunda Dev Music College, Kha Manipur Hindustani Sangeet Mahavidyalaya, Lalit Kala Sangam, Cultural Training Institute, Manipur University, and Manipur University of Culture.

It confined only Visharad, Vid, Nipun, Kovid, B.A., and M.A students and Teachers from the given Institute during the year 2024 2025.

RESEARCH METHODOLOGY:

The present study has been conducted through participant approach of observation along with questionnaire method to be collected from 30 Tablists working or retired from different Institutions, Colleges, and their students in Manipur. The collected data have been analysed using descriptive statistics.

DISCUSSIONS:

Table No. 1: Age, Gender and Marital Status –Wise Classification of Respondents							
	Age			Gender		Marital Status	
	Below 30 Yrs	30-50 Yrs	Above 50 Yrs	Male	Female	Married	Un-Married
Frequency	18	6	6	30	0	10	20
Percentage	60%	20%	20%	100%	0%	33.3%	66.6%

Source: Primary Data collected from Questionnaire

Inference:20% of the respondents are above 50 years of age and 20% of the respondents are between 30-50 years of age. And 60% of the respondents are below 30. All the respondent Tablists are male. There are no female as well as other genders playing Tabla. 33.3% of the respondent Tablists are married whereas 66.6% are Un-Married.

Table No. 2: Institution – Wise Classification of Respondents			
Sl. No.	Name of the Institute	No. of Respondent Tablists	Percentage
1	Shri Shri Bal Mukunda Dev Music College, Imphal	8	26.6%
2	Manipur University of Culture, Imphal	5	16.6%

3	Kha Manipur Hindustani Music College, kakching	6	20%
4	Lalit Kala Sangam musical Institute, Imphal	4	13.3%
5	Manipur University, Imphal	3	10%
6	Cultural Training Institute, Imphal	4	13.3%
Total		30	100%

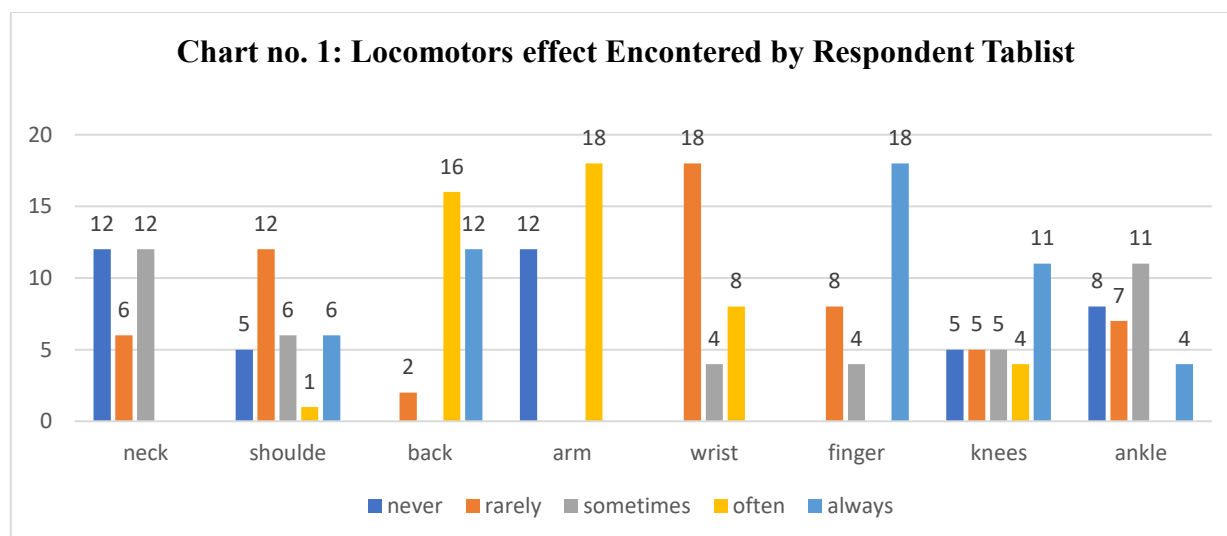
Source: Primary Data collected from Questionnaire

Inference: Shri Shri Bal Mukunda Dev Music College has 26.6% out of the total respondents whereas Manipur University of Culture has 16.6% respondents. Kha Manipur Hindustani Music College, kakching has 20% respondents, Lalit Kala Sangam Institute has 13.3% and Manipur University has 10% and Cultural Training Institute, Imphal has also 13.3% out of the total respondents.

Table No. 3: Classification of Respondents based on Academic Qualification in the field of Tabla			
Sl. No.	Academic Qualification in Tabla	No. of Respondent Tablists	Percentage
1	Visharad/Vid	17	56%
2	Nipun/Kovid/Praveen	4	13.3%
3	BA Music	2	6.6%
4	MA Music	7	23.3%
Total		30	100%

Source: Primary Data collected from Questionnaire

Inference: 56% out of the total respondents are Visharad/Vid which is the highest qualification whereas 13.3% respondents are Nipun/Kovid/Praveen. 6.6% are B.A Music and 23% respondent Tablists are M.A. Music.



Source: Primary Data collected from Questionnaire

Table No. 4: Locomotors effect Encountered by 30 Respondent Tablists

Sl. No.	Cases of Discomfort	5 Point Likert Scale					Total	Avg.	Interpretation	Total Average overall
		Never (1)	Rarely (2)	Sometimes (3)	Often (4)	Always (5)				
		1-1.80	1.81-2.60	2.61-3.40	3.42-4.20	4.21-5.00				
1	Neck	12	6	12			60	2	Rarely	3.02 (Sometimes)
2	Shoulder	5	12	6	1	6	81	2.7	Sometimes	
3	Back		2		16	12	128	4.26	Always	
4	Arm	12			18		84	2.8	Sometimes	
5	Wrist		18	4	8		80	2.66	Sometimes	
6	Fingers		8	4		18	118	3.93	Often	
7	Knee	5	5	5	4	11	101	3.36	Sometimes	
8	Ankle	8	7	11		4	75	2.5	Rarely	

Source: Primary Data collected from Questionnaire

RESULTS:

- 40% of the respondents do not have neck discomforts and 20% of the respondents have complaint for rarely whereas another 40% have neck discomforts sometimes.
- 16% of the respondents do not have shoulder discomforts and 20% respondents have discomforts sometimes and another 20% have always, 40% respondents reported it sometimes but only 3.3% have complaint for often.
- 6.6% of the respondents have complaints about back discomforts rarely whereas 53.3% have discomforts often and 40% complaint for always.
- 40% of the respondents do not have arm discomforts while remaining 60% respondents say for often.
- 60% of the respondent complaint for rarely and 13.3% have complaint for sometimes while remaining 26.6% of the Respondents said that they have often discomforts in their wrist.
- 26.6% respondents have complaint about fingers rarely and 13.3% of the respondents have problem in fingers and remaining 60% said always problem.
- 16.6% each said that they have complaints for never, rarely as well as at sometimes while 36.6% complaint for always discomforts in their knees.
- 26.6% respondents have complaint for ankle problem and 23.3% complaint for rarely and 13.3% complaint it 36.6% respondents have complaint for always discomfort in ankle. Finally found that All the Tablists faced the problem of Back locomotors effect whereas, Shoulder, Arm, Wrist, and

Knee have problems sometimes. There are rarely discomforts on Neck, and Ankle. At the overall, it can be said that sometimes 8 parts of the body of Manipuri Tablists have locomotors effect.

SUGGESTIONS:

Educational initiatives, workshops, and resources that address proper technique, warm-up exercises, and massage therapy, injury prevention strategies can equip Tabla players with the knowledge and tools to safeguard their physical health. Following are some of the suggestions to avoid locomotors effect of Tabla Players:

- Perform gentle warm-up exercises and stretches for wrists, fingers, arms, and shoulders before playing to improve flexibility and prevent strain.
- Maintain correct posture while playing Tabla. Sit with back straight and shoulders relaxed. Avoid slouching or leaning forward excessively.
- Avoid repetitive movements by incorporating a variety of Tabla strokes and techniques into the practice routine. This helps distribute the workload across different muscle groups
- Ensure that the height and position of the Tabla are adjusted ergonomically to suit the body size and playing style. Use a stable and comfortable chair or stool.
- Take frequent short breaks during practice or performance sessions to rest the muscles and prevent overuse injuries. Use these breaks to stretch and relax hands and arms..
- Focus on using proper hand and finger technique to minimize strain. Practice efficient stroke execution and avoid excessive tension in hands and arms.
- Incorporate exercises to strengthen the muscles of hands, wrists, and arms. This can include wrist curls, finger exercises, and forearm strengthening exercises.
- Allow adequate time for rest and recovery between practice sessions or performances. Proper rest is essential for muscle repair and growth.
- Stay hydrated and maintains a balanced diet to support muscle health and recovery. Proper hydration and nutrition can help prevent cramps and muscle fatigue.
- Ensure that the Tabla is in good condition and properly tuned. Poorly maintained instruments can require more force to play, increasing the risk of injury.
- Pay attention to any signs of discomfort or pain while playing. Stop immediately if you experience any pain and consult a healthcare professional if needed.
- Consider seeking guidance from a qualified Tabla teacher or physiotherapist who can provide personalized advice on technique, posture, and injury prevention.

By implementing these measures, Tabla players can reduce the risk of musculoskeletal discomforts and enjoy playing with greater comfort and longevity.

CONCLUSION:

It has been found out the result that majority of the Tabla players have sometimes encountered locomotors effect on Back, Shoulder, Neck, Arms, Wrist, Fingers, and knees which are the most commonly involved areas, it can lead to long-term health issues if not addressed proactively. A Tablist has to be very careful in their activities. They need to maintain a balance between their practice and performance as well as their physical wellbeing. It is a fact that it cannot be ignored to have locomotors effect among the Tablists, but it can be avoided up to some extend if the Tablists are more careful. In

order to have a prolonged performance and continued service, a regular physical, manual and massage therapies are required for avoidance of such discomforts by the Tablists.

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