

## BIO-DATA

1. **Name** : Dr. Narinder Kaur Multani
2. **Designation** : **Professor**
3. **Department** : **Physiotherapy**
4. **Date of Birth** : **02-08-1966**
5. **Address for Correspondence** : **227-Urban Estate, Phase-III**  
**Patiala-147002**

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- 6 **Areas of Specialisation** : **Sports Physiotherapy**  
**Osteoarthritis**  
**Geriatric Physiotherapy**

### 7. **Academic Qualifications:**

- B.P.T. from M. S. Uni. Baroda, 1988
- M.S.P.T. from GNDU Amritsar, 1998
- Ph.D. from Punjabi University, Patiala, January 2005

### ADDITIONAL QUALIFICATION:

Music Instrumental

Music Vocal

### 8. **Membership of Professional Bodies/Organisations**

- i) Indian Association of Physiotherapists
- ii) Exercise Fitness and Health Alliance

### 9. **Medals/Awards/Honours/Received**

- i) Jewel of India award 2006 conferred for outstanding contribution in the field of physiotherapy by International Education Society.
- ii) IAP Chandigarh Branch Oration Award 2010.
- iii) Dr. N S Yadava Oration Award 2011

### 10. **Details of Experience:**

Clinical/ Administrative/Teaching experience: **24 years**

### 11. **Published Work (Please specify numbers only):**

- a. Research Papers
  - i) National = 34
  - ii) International = 19
- b. Books

- i) “The Principles of Geriatric Physiotherapy”, JAYPEE brothers, Medical Publishers (P) Ltd, New Delhi
- ii) “Clinical Significance of Electro diagnosis in Disc Herniation”, Lambert Academic Publishing, Saarbrucken, Germany
- iii) “Role of Footwear Alteration and Bracing in Treatment of Osteoarthritis Knee”, 2016, Laxmi Book Publication, Solapur

## 11. R & D Projects

- i) **Title:** “Impact of Therapeutic Intervention in Patients of Osteoporosis”  
**Funding Agency:** UGC, New Delhi  
**Date of implementation:** 1.5. 2009  
**Tenure:** 3 years

## 12. Invited Talks/Articles

### i) ARTICLES PUBLISHED:

- Decreasing sex ratio-A departmental survey was published in ‘The Beas’:114-115; 2001-2002.
- Physiotherapy: Historical and Current Panorama in Punjab was published in conference proceedings of 1<sup>st</sup> Annual Conference of Punjab Branch of Indian Association of Physiotherapists: 3-7; 2002.
- Computing Hazards was published in ‘The Beas’:143-146; 2002-2003.

### ii) Invited lectures or presentations for conferences/ symposia:

- “Theme Symposium”–(Movement Towards Function), in 45<sup>th</sup> Annual Conference of IAP held at Kolkata 2-4 February, 2006
- A series of three lectures in UGC sponsored Refresher Course on “Automated Software Development” in The School of Mathematics and Computer Applications of Thapar Institute of Engineering and technology, Patiala on 14<sup>th</sup> December 2006
- “Fundamentals of Sports Physiotherapy” in Department of Physiotherapy, S. Bhagwan Singh Post Graduate Institute of Biomedical Sciences and Research, Balawala, Dehradun on 23-24 March, 2007
- “Computing Hazards” in Department of Computer Science, Guru Nanak National College, Nakodar (Jalandhar) on 03-09-2007
- One day Seminar on “Geriatric Physiotherapy” in College of Physiotherapy, S.S.G. Hospital, Baroda organized by Indian Association of Physiotherapists, Baroda Branch, 30<sup>th</sup> March 2008
- A lecture in Refresher Course in Computer Science and Applications organized by the Academic Staff College, Punjabi University, Patiala, on 02-06-2010.
- “Postural strategies: Implications for falls in elderly” in 1<sup>st</sup> Annual Conference and Scientific Meet of the Indian Association of Physiotherapists Chandigarh Branch, 13-14 November, 2010.
- “Computer Application in Physiotherapy” in UGC sponsored National Seminar on Role of Statistics in Physiotherapy, 25-27 November, 2010 at Jalandhar
- CME on aging, 49<sup>th</sup> Annual Conference of IAP held at Pune 7-9 January, 2011
- “Prevalence and Predictors of Osteoporosis: A Story Beyond Calcium” in Physiocon Chandigarh, 3<sup>rd</sup> & 4<sup>th</sup> December, 2011
- A series of three lectures on “Research Tools in Physiotherapy”
- A lecture on “Postural deformities” in Department of Computer Science, Guru Nanak National College, Nakodar (Jalandhar) on 18-10-2014

**13. Ph.D. Students guided/under guidance (Details) :**

<b>S. No.</b>	<b>Name of the Student</b>	<b>Title of Thesis</b>	<b>Year of Completion</b>
1.	Mr. Narkeesh A.	“Clinical Significance of Electrodiagnosis in PIVD as Compared With Radiodiagnosis”	<b>Awarded – 2010</b>
2.	Mr. Aksh Chahal	“Impact of Therapeutic Intervention in Patients of Osteoporosis”	<b>Awarded – 2014</b>
3.	Mr. Jaspreet Singh Vij	“Gait pattern in post stroke hemiplegic patients: analysis and correction”	<b>Awarded – 2014</b>
4.	Mrs. Sonia Singh	“Sensory motor and balance training in aging population: functional outcome”	<b>Awarded – 2014</b>
5.	Mrs. Pragya	“Predicting dynamic abilities in relation with aging”	<b>Awarded - 2014</b>
6.	Mrs. Kanimozhi	“Role of Footwear Alterations and Bracing in the Treatment of Osteoarthritis of Knee”	<b>Awarded - 2015</b>
7.	Bhawna	“Predictors of Shoulder Pain Among Adults in Northern India”	<b>Submitted</b>
8.	Amanpreet Singh	“Sonographic Evaluation of Changes induced in Articular Cartilage of Knee by kinetic Chain Exercise”	<b>Viva Awaited</b>

**14. List of Papers/Courses taught at P.G. and U.G. Level**

<b>S. No.</b>	<b>Paper</b>	<b>Class</b>
1.	Exercise Therapy	UG
2.	Biomechanics	UG
3.	Electro Therapy	UG
4.	Physiotherapy in Medical and Surgical Conditions	UG
5.	Physiotherapy in Orthopaedics	UG
6.	Traumatic Injuries in Athletes	PG
7.	Non-traumatic Medical Conditions of Athletes	PG
8.	Research Tools in	Ph.D.

## 15. List of Papers Published:

### *NATIONAL:*

1. A Comparative Study of Physical Fitness in Veteran Sports Persons and Non Sports Persons published in Current Researches in Sports Medicine, Edited by N B Shukla, Lanka Publishers, Delhi: 107-124; 1999.
2. The changing role of physiotherapists in the management of O.A. Knee has been published in "Physiotherapy" The Journal of The Indian Association of Physiotherapist, 1 (1):15-20; 2005.
3. Research paper entitled "Quadriceps Strength of Patients of Osteoarthritis Knee: In Relationships to pain and Disability was published in the Journal of Exercise Science and Physiotherapy ISSN 0973-2020, 1(1 & 2): 38-45; 2005.
4. A healthy body composition program for the patients of osteoarthritis knee was published in the journal of Indian Association of Sports Scientists and Physical Educationists, ISSN 0971-0140, 14 (1 & 2): 75-89; 2005.
5. To investigate the effectiveness of telemedicine services integrated into physiotherapeutic health care system has been published in the Journal of Exercise Science and Physiotherapy ISSN 0973-2020, 2: 87-91; 2006.
6. Comparison of caudal and anteroposterior glide mobilization for the improvement of abduction range of motion has been published in the Journal of Exercise Science and Physiotherapy ISSN 0973-2020, 2: 59-65; 2006.
7. A psychometric analysis of patient satisfaction with physical therapy care has been published in "Physiotherapy" The Journal of The Indian Association of Physiotherapists, ISSN 0973-6549, 2 (2): 21-27; 2006.
8. Efficacy of neural mobilisation in sciatica published in the Journal of Exercise Science and Physiotherapy ISSN 0973-2020, 3 (2): 136-141; 2007.
9. Development & Validation of Geriatric Assessment Tools: A preliminary report from Indian Population is published in the Journal of Exercise Science and Physiotherapy ISSN 0973-2020, 3 (2):103-110; 2007.
10. Changes in MNCV due to different mechanical compressive forces to the proximal region of limb in normal human subjects published in Journal of Exercise Science and Physiotherapy ISSN 0973-2020, 3 (2):165-167; 2007.
11. Effect of moderate intensity aerobic exercise training on coronary artery disease (CAD) risk factors in grade-1 hypertensive patients published in Physiotherapy The Journal of The Indian Association of Physiotherapists, 4-9; 2009.
12. Cover Story - The Phenomenon of Ageing: A Physiotherapist's Perspective published in Physiotimes 4-10: 2010
13. A study of risk factors: comparison between osteoporosis and osteopenia in the district of Patiala published in Journal of Exercise Science and Physiotherapy ISSN 0973-2020, 6 (1): 50-56; 2010.
14. Comparison of breathing exercises and aerobic exercise in asthmatic children published in Journal of Exercise Science and Physiotherapy ISSN 0973-2020, 6 (2): 112-119; 2010
15. Computer Application in Physiotherapy – My Current Perspective published in Conference Proceedings, UGC sponsored National Seminar on Role of Statistics in Physiotherapy, 25-27 November, 2010 at Jalandhar

16. Determination of Optimal Grip Force with Minimal Discomfort for Various Positions of Ulnar Deviation with Constant Extension published in Conference Proceedings, UGC sponsored National Seminar on Role of Statistics in Physiotherapy, 25-27 November, 2010 at Jalandhar
17. Statistics of Osteoporosis published in Conference Proceedings, UGC sponsored National Seminar on Role of Statistics in Physiotherapy, 25-27 November, 2010 at Jalandhar
18. Use of Unrelated t-test in Physiotherapy published in Conference Proceedings, UGC sponsored National Seminar on Role of Statistics in Physiotherapy, 25-27 November, 2010 at Jalandhar“
19. Statistics of Falls in Elderly published in Conference Proceedings, UGC sponsored National Seminar on Role of Statistics in Physiotherapy, 25-27 November, 2010 at Jalandhar
20. Intrarater and Interrater Reliability of a Foot Type Classification Method published in Conference Proceedings, UGC sponsored National Seminar on Role of Statistics in Physiotherapy, 25-27 November, 2010 at Jalandhar
21. Statistics of Post Stroke Hemiparetic Patients published in Conference Proceedings, UGC sponsored National Seminar on Role of Statistics in Physiotherapy, 25-27 November, 2010 at Jalandhar
22. Correlation between Age, BMI, Joint Space and VAS in Osteoarthritis Knee published in Conference Proceedings, UGC sponsored National Seminar on Role of Statistics in Physiotherapy, 25-27 November, 2010 at Jalandhar
23. Are we neglecting foot type in our routine assessment of mechanical pain? published in Physiotimes: 10-12; 2011
24. Influence of Age on Lung Function Tests published in Journal of Exercise Science and Physiotherapy ISSN 0973-2020, 8(1):1-7; 2012
25. Efficacy of Neuro-Development Therapy Based Gait Training in Correction of Gait Pattern of Post Stroke Hemiparetic Patients published in Journal of Exercise Science and Physiotherapy ISSN 0973-2020, 8 (1):30-38; 2012
26. Role of Physiotherapy In Knee Osteoarthritis in Physiotherapy In Health Care Need And The Reality, 85-91, Publication Bureau, Punjabi University Patiala, 2012
27. Role of Physiotherapy In Tennis Elbow In Health Care Need And The Reality, 127-131, Publication Bureau, Punjabi University Patiala, 2012
28. Technique of Chest Physiotherapy In Health Care Need And The Reality, 162-164, Publication Bureau, Punjabi University Patiala, 2012
29. Extended Role of Physiotherapy In Emergency Department In Health Care Need And The Reality, 213-218, Publication Bureau, Punjabi University Patiala, 2012
30. Comparative study of the age related structural changes in the knee between sportspersons and non sportspersons published in Journal of Exercise Science and Physiotherapy ISSN 0973-2020, 9 (1):23-30; 2013
31. Effect of Dorsiflexor Muscle Strengthening Using Russian Currents on Balance and Function in Elderly published in Human Biology Review ISSN 2277 4424, 2 (2):176-184; 2013
32. Quantitative Analysis of Gait Parameters in Post Stroke Hemiparetic Patients in Journal of The Indian Academy of Geriatrics 9 (2):56-61; 2013
33. Role of Footwear Alteration along with Conventional Physiotherapy in Osteoarthritis Knee published in Journal of Exercise Science and Physiotherapy ISSN 0973-2020, 10 (2): 122-130; 2014

34. Relationship of Dynamic balance with lower extremity muscular strength and endurance in Football Players. *Indian Journal of Research*. ISSN- 2250-1991, 06(11); 2017

***INTERNATIONAL:***

1. Effects of Quadriceps Strength Training on Progression of Osteoarthritis Knee was published in the book of abstracts 4<sup>th</sup> International Conference on Strength Training, Aristotle University of Thessaloniki, Greece: 215-217; 2004.
2. Clinical significance of soleus H-reflex in lumbar radiculopathy in Indian adults published in *International Journal of Physical Therapy (IJOPT)* 1(1); 31-35; 2007.
3. Clinical Significance of electrodiagnosis in L5-S1 disc herniation in *Physiotherapy & Occupational Therapy Journal - An International Journal*, ISSN 0974-5777, Oct.-Dec. 1(2); 99-106; 2008.
4. Effect of Aging on components of neurophysiological balance control in Conference proceedings, World Physical Therapy 2011, from 20-23 June 2011 at Amsterdam, Netherlands; es284-es285
5. Predictors of Bone Mineral Density in Patients of Osteoporosis, World Physical Therapy 2011, from 20-23 June 2011 at Amsterdam, Netherlands; es873-es874
6. Impact of aging on anthropometry, architecture and function of quadriceps, World Physical Therapy 2011, from 20-23 June 2011 at Amsterdam, Netherlands; es872-873
7. Relationships amongst gait speed, balance and lower extremity muscle strength in elderly, World Physical Therapy 2011, from 20-23 June 2011 at Amsterdam, Netherlands; es825
8. Effectiveness of Plyometric Training in the Improvement of Sports Specific Skill of Basketball Players in *Indian Journal of Physiotherapy and Occupational Therapy - An International Journal*, ISSN P - 0973-5666, ISSN E - 0973-5674, Jan.-March. 6(1); 77-82; 2012
9. Relationship of Foot Characteristics on Balance with Ageing in *Indian Journal of Physiotherapy and Occupational Therapy - An International Journal*, ISSN P - 0973-5666, ISSN E - 0973-5674, Jan.-March. 6(1); 107-111; 2012
10. Impact of Sporting Activities on Bone Mineral Density in *Physical Therapy Research & Practice*, ISSN No: 2348-18, Oct-Dec 1(1); 45-54; 2013
11. Level of Physical Fitness Among Physiotherapy Students A Study of Punjab and Haryana in *World Applied Sciences Journal*, ISSN 1818-4952, 21(8); 1136-1140, 2013
12. Investigating the Physiological Changes in the Cardiovascular System Across Ages 25 to 75 Years in *Indian Journal of Physiotherapy and Occupational Therapy - An International Journal*, ISSN P - 0973-5666, ISSN E - 0973-5674, Jan.-March. 8(1); 123-128; 2014
13. Observational Study on Foot Pressure Distribution in Young and Adults in *International Journal of Physiotherapy and Research*, ISSN 2321-1822, 2(4);648-52; 2014
14. NDT Based Gait Training as compared to lower limb strengthening in correction of Gait Pattern of Post-stroke Hemiparetic patients in World Confederation for Physical therapy Congress 2015, 1-4 May, Singapore.
15. Relationship among lower extremity biomechanical alignment and balance abilities in community dwelling older adults in World Confederation for Physical therapy Congress 2015, 1-4 May, Singapore.
16. Prevalence of Shoulder pain among adults in Northern India. *Asian Journal of Health and Medical Research*. June 2(2); 18-22; 2016

17. Shoulder muscle strength in adults with and without shoulder pain. International Journal of Physiotherapy and Research. ISSN 2321-1822, 4(4); 1616-21; 2016
18. Association of menstrual function with bone mineral density amongst Punjabi University Female Athletes. International Journal of Physiotherapy. ISSN: 2348-8336, 4(4);21-216; 2017.
19. Effect of age, cartilage health and pain on the isometric strength of knee musculature: a cross sectional study. International Journal of Physiotherapy and Research. ISSN 2321-1822, 5(6); 2515-20; 2017.

**Date:** \_\_/\_\_/\_\_\_\_

**(Signature of the Teacher)**