

**Zakir Uddin**

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**Education**

- 2014 PhD (Rehabilitation Science), McMaster University, Canada  
Supervisor: Dr. Joy C MacDermid  
Thesis Title: Quantitative Sensory Testing in Musculoskeletal Pain Disorders
- 2006 MSc (Physical Therapy), Kobe University, Japan  
Thesis Title: Frozen Shoulder Pain Management by Physiotherapy
- 1998 BSc (Physiotherapy), University of Dhaka (National Institute of Traumatology & Orthopedic Rehabilitation), Bangladesh

**Positions and employment**

- 2014- *Associate Professor* (offered), Bangladesh University of Health Sciences, Dhaka, Bangladesh
- 2011-2013 *Teaching Assistant*, McMaster University, Canada
- 2006-2009 *Assistant Professor*, Bangladesh Institute of Health Sciences, University of Dhaka, Bangladesh
- 2004- 2006 *Teaching and Research Assistant*, Kobe University and Hiroshima University, Japan.
- 2002-2003 *Lecturer*, National Institute of Traumatology & Orthopedic Rehabilitation, University of Dhaka, Bangladesh
- 2001-2004 *Consultant Physiotherapist*, Ibn Sina Spine Center and *Visiting Physiotherapist*, Millennium Heart & General Hospital (ICU based), Dhaka, Bangladesh.
- 1999-2003 *Private Practitioner*, AlManar Medical Services, Dhaka, Bangladesh.

**Invitational Lectures and Workshops (Oral Presentation)**

- June 2014 Title: Psychophysical and patient factors as determinants of pain, function and health status in shoulder disorders. Invited as a scholar at the European Pain School 2014, Siena, Italy.
- May 2014 Title: The effect of Quantitative Sensory Testing and Patient Factors on Pain, Function, and Health Status in Shoulder Disorders. 35<sup>th</sup> annual meeting of Canadian Pain Society, Quebec city, Quebec, Canada (accepted as a Hot Topic).
- Mar 2014 Title: Detection of Abnormal Pain Response in Veterans with Chronic Pain. Invited presentation at the College of Applied Health Sciences, University of Illinois at Urbana-Champaign, Illinois, USA.

- Jan 2014 Title: The effect of Quantitative Sensory Testing and Patient Factors on Pain, Function, and Health Status in Shoulder Disorders. Bone and Joint Injury & Repair Conference, London, Ontario, Canada.
- Jan 2014 Title: Psychophysical and Patient Factors as Determinants of Pain, Function and Health Status in Shoulder Disorders. Research round presentation at School of Rehabilitation Science, McMaster University.
- Oct 2013 Title: Quantitative Sensory Testing in Musculoskeletal Pain. Invited presentation at Centre for the Study of Pain, Faculties of Dentistry & Medicine, University of Toronto.
- May 2013 Title: The Current Perception Threshold Test Differentiates subgroup of Mechanical Neck Disorder. 15th Annual Rehabilitation Research Colloquium, Queen's University, Canada.
- May 2013 Title: Quantitative Sensory Testing in Musculoskeletal Disorders. Research round presentation at School of Rehabilitation Science, McMaster University. Canada.
- Feb 2013 Title: Knowledge Translation for the two Quantitative Sensory Tests: Cold Stress Test and The Ten Test and their usability with clinicians. Research round presentation at School of Rehabilitation Science, McMaster University. Canada.
- Nov 2009 Title: Integration of Pain and Cognition. Seminar at the Department of Kinesiology, University of Waterloo. Canada.
- Nov 2008 Title: Basic of Musculoskeletal Pain –research to clinical practice. A 6-days short training program/workshop at Bangladesh Institute of Health Sciences.
- Sep 2008 Title: Rethink the Health Care System of Bangladesh & Physiotherapy. World Physical Day Seminar at National Press Club, Dhaka, Bangladesh.
- Aug 2008 Title: TENS- The New Era of Medicine. A CPD course arranged by Bangladesh Physiotherapy Association at Bangladesh Institute of Health Sciences.
- Jun 2008 Title: Pain & Physiotherapy. An invited lecture at Bangladesh Rehabilitation Centre for Trauma Victims (BRCT).
- Apr 2008 Title: World History & Update of Physiotherapy. An invited lecture arranged by Bangladesh Physiotherapy Association at Center for Rehabilitation for the Paralyses (CRP), Dhaka.
- Mar 2008 Title: Basics of Pain management. A Holistic Approach. An invited lecture at Gono University, Dhaka.
- Dec 2007 Title: Combat Back Pain as NCDs for Diabetic Patients. 13th Diabetic and Endocrine Conference, Dhaka, Bangladesh.
- Nov 2007 Title: Management & Complexity of Pain for Physiotherapist. A 8-hours CPD course & workshop at Bangladesh Institute of Health Sciences, Dhaka.
- Jan 2007 Title: Management of Back Pain in Diabetic Patients. A 2-hours workshop/seminar at Dhanmondi Health Care center, HCDP, Diabetic Association of Bangladesh
- Jul 2006 Title: Next Generation Medicine and Imaging Techniques. A 2-hours CPD course at PRCD Auditorium, Gulshan, Dhaka)

### **Scholarly and Professional Service**

- 2014- Reviewer of Refereed Journals: (1) *The Journal of Pain*,  
(2) *Journal of Pharmacy and Pharmacology* (3) *Molecules* (ISSN 1420-3049)
- 2013- Deputy Chief Editor- *PhysioPress* (a Physiotherapy Magazine)
- 2010- Member Canadian Pain Coalition (CPC)

- 2009 Chair-Scientific committee- 2nd World Congress on Manual Therapy; 2009, Dhaka  
2007-08 Vice President - Bangladesh Physiotherapy Association  
2006-08 Editorial Board member, Bangladesh Physiotherapy Journal, ISSN: 1727-6748  
2007- Regular member Bangladesh Society for Study of Pain (BSSP).  
2004- Permanent member (17533), International Association for the Study of Pain (IASP)  
2003- General member (GM-67), Bangladesh Physiotherapy Association (BPA)  
2003-08 Volunteer, Physiotherapy Rehabilitation Center for the Disabled, Dhaka, Bangladesh

**Publications in Refereed Journals (PhD study related manuscript category: A,B & C = 15)**

**A. Published: 9**

1. Uddin Z, MacDermid JC, Galea V. Executive Function: Application In Rehabilitation of Chronic Pain. *Crit Rev Phys Rehabil Med.* 2012;24(3-4):233-250.
2. Uddin Z, MacDermid JC, Packham T. The Ten Test for Sensation. *Journal of Physiotherapy.* 2013; 59(2):132-132.
3. Uddin Z, MacDermid JC, Galea V. A Knowledge Translation Perspective on Executive Function in Clinical Practice to Mitigate Chronic Pain. *Health Science Inquiry.* 2013;4(1):100-102.
4. Uddin Z, MacDermid JC, Packham T. Ice-water (cold stress) immersion testing. *Journal of Physiotherapy.* 2013;59(4):277-277.
5. Uddin Z, MacDermid JC, Galea V, Gross AR, Pierrynowski MR. Reliability Indices, Limits of Agreement and Construct Validity of Current Perception Threshold Test in Mechanical Neck Disorder. *Crit Rev Phys Rehabil Med.* 2013;25(3-4):25–37.
6. Uddin Z, MacDermid JC, Packham T. Clinical implementation of two Quantitative Sensory Tests: Cold Stress Test and The Ten Test. *Physiotherapy Practice and Research.* 2014;35(1):33-40.
7. Uddin Z, MacDermid JC, Ham H. Test-Retest Reliability and Validity of Normative Cut-offs of the Two Devices Measuring Touch Threshold: Weinstein Enhanced Sensory Test and Pressure Specified Sensory Device. *Hand Therapy.* 2014;19(1):3-10.
8. Uddin Z, MacDermid JC. Pain Hypersensitivity: A bio-psychological explanation of chronic musculoskeletal pain and underpinning theory. *Pain Studies and Treatment.* 2014;2(2):31-35.
9. Uddin Z, MacDermid JC, Galea V, Gross AR, Pierrynowski MR. The Current Perception Threshold Test Differentiates Categories of Mechanical Neck Disorder. *J Orthop Sports Phys Ther.* 2014;44(7):532-540.

**B. Accepted, Under Revision/Review: 5**

10. Uddin Z, MacDermid JC. A knowledge translation perspective on the two quantitative sensory tests and their usability with clinicians. *Journal of Novel Physiotherapies.* 2014: Accepted.
11. Uddin Z, MacDermid JC. Quantitative Sensory Testing in Musculoskeletal Pain Disorders. *Pain Medicine (Under Revision).*
12. Uddin Z, MacDermid JC, Woodhouse LJ, Triano JJ, Galea V, Gross AR. The Effect of Pressure Pain Sensitivity and Patient Factors on Self-reported Pain-disability in Patient with Chronic Neck Pain. *The Open Orthopedics Journal (Under Revision).*
13. Uddin Z, MacDermid JC, Moro J, Galea V, Gross AR. Psychophysical and Patient Factors as Determinants of Pain, Function and Health Status in Shoulder Disorders. *Int J Shoulder Surg (Under Review).*

14. Uddin Z, MacDermid JC. Chronic Pain: The Importance of Linking Theory to Rehabilitation Research and Practice. *Crit Rev Phys Rehabil Med* (Under Review).

**C. Manuscript in progress: 1**

15. Uddin Z, MacDermid JC. The Power of the Ten Test for Measuring Pain and Sensation. *Pain Medicine* (Target Journal).

**Publications in open access web or magazine (Non-referred)**

1. Uddin Z, MacDermid JC. An instruction manual for two Quantitative Sensory Tests: Cold Stress Test and The Ten Test. A 13-pages (single space) manual with references © McMaster University, 2012. Available at, <http://www.srs-mcmaster.ca/Portals/20/Research/An%20instruction%20manual%20for%20two%20Quantitative%20Sensory%20Tests.pdf>
2. Uddin Z. Bio-psychosocial Model of Health and Rehabilitation. *Physiopress*. 2013;1:42-43.
3. Uddin Z, Jung B. Poster presentation. A 5-pages article with instruction. In McMaster Avenue to Learn: curriculum information for the students (authorized access only) © McMaster University, 2013.
4. Uddin Z. Philosophy and Science of Physiotherapy: Developed World Vs Bangladesh Perspective. A theme paper for “40-years of physiotherapy profession in Bangladesh”. Published in the celebration magazine, August 2012.
5. Uddin Z. How to get a Scholarship for Higher Study: IDB Merit Scholarship. *Physiopress*. 2014;2: in press.

**Publications in Non-referred Journals (non peer reviewed)**

1. Uddin Z. Soft tissue rheumatism among diabetic patients – "Frozen shoulder" the big challenge! How to manage and prevent? *Diabetic and Endocrine Journal* (formally *Journal of the Diabetic Association of Bangladesh*), December 2008, 37 (Suppl-1), 18-20.
2. Uddin Z, Rana M, Sarker AH, Islam ASMM. Assessment of chronic back pain sufferers in different pain assessment scales for analysis and understanding of pain perception. *Bangladesh Physiotherapy Journal*, July 2008, 4(1) 4-7.
3. Rahman D, Uddin Z, Jahan I, Uddin S. Comparison of effectiveness of manual therapy Vs ultrasound therapy for shoulder pain due to secondary impingement. *Bangladesh Physiotherapy Journal*, July 2008, 4(1) 13-16.
4. Uddin Z. Combat Back Pain as NCDs for Diabetic Patients. *Diabetic and Endocrine Journal* (formally *Journal of the Diabetic Association of Bangladesh*), December 2007, 36 (Suppl-1), 30-33.
5. Uddin Z, Yoneda Y, Matsubara T. Analytical view of Frozen Shoulder Pain Management by Physiotherapy. *Bangladesh Physiotherapy Journal*, November 2007, 3(1) 3-7.
6. Uddin Z. Enigma of Frozen Shoulder/Periarthritis. *Bangladesh Physiotherapy Journal*, August 2005, 2(1),10-12.
7. Uddin Z, Ali MI. Importance of physiotherapy in Conservative Management of spine related problems- a practical overview. *Bangladesh Physiotherapy Journal*, May 2003, 1(3), 82-84.

**Conference Procedure and related publications**

1. Uddin Z, MacDermid JC, Galea V, Gross AR, Pierrynowski J. The Current Perception Threshold Test Differentiates Categories of Mechanical Neck Disorder. 4th International Congress on Neuropathic Pain, Toronto, May 2013.
2. Uddin Z, MacDermid JC, Galea V, Gross AR, Pierrynowski J. Reliability Indices, Limits Of Agreement And Construct Validity Of Current Perception Threshold Test In Nonspecific Neck Pain. 4th International Congress on Neuropathic Pain, Toronto, May 2013.
3. Uddin Z, MacDermid JC, Galea V, Gross AR, Pierrynowski J. Test-Retest and Inter-Trial Reliability, Internal Consistency, and Construct Validity of Current Perception Threshold Test in Mechanical Neck Disorder. Canadian Physiotherapy Association National Congress, Montreal, May 2013. Abstract: S04.
4. Uddin Z, MacDermid JC, Galea V, Gross AR, Pierrynowski J. The Current Perception Threshold Test Differentiates Categories of Mechanical Neck Disorder. Health Sciences Research Plenary: McMaster 2012 & 2013.
5. Uddin Z, MacDermid JC, Galea V, Gross AR, Pierrynowski J. Reliability and validity of current perception threshold test in mechanical neck disorder. Value in Health. 2013;16(3):A111. ISPOR 18th Annual International Meeting, New Orleans 2013.
6. Uddin Z, MacDermid JC, Galea V, Gross AR, Pierrynowski J. Does Current Perception Threshold Test Can Differentiate Categories of Mechanical Neck Disorder? Value in Health. 2012;15(4):A62. ISPOR 17th Annual International Meeting, Washington DC 2012.
7. Uddin Z, MacDermid JC, Galea V, Gross AR, Pierrynowski J. Does Current Perception Threshold Test Differentiate Categories of Mechanical Neck. Disorder? 14th World Congress on Pain, Milan 2012, Abstract (ISBN-13: 978-0-931092-74-9): PT 084.
8. Uddin Z. Lower erector spinae muscles activation in commonly adopted sitting posture and low back pain. 13th World Congress on Pain, Montreal, Aug-Sep 2010. Abstract (ISBN-13: 978-0-931092-88-6): 1925/poster PT080.
9. Uddin Z, Islam ASMM, Islam MS. Role of Faradism for Diabetic Foot Pain Syndrome- A Clinical Evaluation. IDF 20th World Diabetes Congress, Montréal, October 2009. Abstract (MT-0333): P-1022 (p352).
10. Uddin Z, Islam ASMM. Effectiveness Study of Exercise Vs Mobilization Technique for Tennis Elbow Pain. 2nd World Congress on Manual Therapy, April 2009, Dhaka.
11. Uddin Z. Soft tissue rheumatism among diabetic patients – "Frozen shoulder" the big challenge! How to manage and prevent? 14th Diabetic and Endocrine Conference, November 2008, Dhaka.
12. Uddin Z. ACL reconstruction and rehabilitation- A view from Japan. 3rd National Physiotherapy Congress and Scientific Seminar, November 2008, Dhaka.
13. Uddin Z, Rana M. Analysis of pain perception among chronic musculoskeletal pain sufferers with various pain assessment scales in three different cultural settings. 12th World Congress on Pain. August 2008, Glasgow UK. Abstract (ISBN-13: 978-0-931092-74-9): PH312.
14. Uddin Z, Rana M, Sarker AH, Islam ASMM. Analysis of pain perception for chronic back pain sufferers in different pain assessment scales. Abstract-10th Bangladesh Society for Study of Pain and 4th South Asian Regional Pain Society Congress on Pain. April 2008, Dhaka.
15. Uddin Z, Yoneda T, Matsubara T, Miki A, Ali MI. Brief Analysis of 1007 Lumber disc Surgery and its end results. 4th World Congress on NeuroRehabilitation, Hong Kong, February 2006. Neurorehabilitation and Neural Repair 2006; 20:147(P1-085).

16. Uddin Z, Yoneda T, Matsubara T. Indoor air pollution in developing countries: Cooking smoke, a silent killer. International conference on Women and Children's Issue, Dhaka, February 2006.
17. Uddin Z, Ali MI. Frozen Shoulder Pain Management by Physiotherapy. 11th World Congress on Pain. August 2005, Sydney, Australia. Abstract (ISBN-13: 978-0-931092-64-0) : 1346-P216: 478.

### **Other activities**

**Professional Short Training:** # Graduate level research training at the Spine Biomechanics and Social Neuroscience & Health Laboratories (University of Waterloo, Canada) # Stem cell culture in microgravity environment, physical stimulation of tissues (Hiroshima University, Japan) # Cervical manual therapy & Dosed exercise therapy (Manual Therapy International, Tokyo, Japan) # Musculoskeletal Pain: Mechanisms & Management (Australia) # Low Back Pain (Australia) # Anterior Cruciate Ligament, Reconstruction & Rehabilitation (Japan) # Functional Rehabilitation (Japan) # Bowen Technique (in Bangladesh by UK trainers) # Working with communication difficulties (in Bangladesh by UK trainers) # Iontophoresis (India).

**Knowledge translation product:** I developed an instruction manual and a 3-minutes you tube video on “*Two simple quantitative sensory tests*” (the video available at, <http://www.youtube.com/watch?v=ktvjsqbIfUM>, and the manual available at, <http://www.srs-mcmaster.ca/Portals/20/Research/An%20instruction%20manual%20for%20two%20Quantitative%20Sensory%20Tests.pdf>) targeting knowledge users (e.g. clinicians, researchers and students). The developed cost effective QST tools are now using as a measuring tool for research at the McMaster & Western Universities.

**Areas of interest:** *Research interests* are (I) Detection of abnormal pain responses (II) Identifying personal and physiological risk factors for development of chronic musculoskeletal pain. *Clinical interests* focus on minimizing pain and disability in patients with chronic musculoskeletal disorders.