













**Figure 2:** Comparative graph showing performance of First Aid and Primary Injury management content knowledge test

#### 4.6 Discussions of the Overall First Aid and Primary Injury Management Test Performance

Increased knowledge of first aid and primary injury management concepts, such as basic first aid training, continuing education courses and clinics, increasing the knowledge about the CPR, instant emergency management, thus, teachers need urgent, correct and repetitive trainings on the first aid process and primary injury management. Will result in increased the knowledge (Asad Abbas, Syeda Ismat Bukhari, Farah Ahmad<sup>3</sup> (2011) Necati Hırça (2012), Lynn Castro (2010), Redfearn (1980)) pointed out that first aid knowledge and primary injury management knowledge were predictive of first aid activity and knowledge predicted maintenance of moderate and vigorous first aid. This study examined first aid and primary injury management, content knowledge of pre-service physical education teachers using the first aid and primary injury management questionnaire included many concepts such as of the treatment of injury, knowledge and prevention that physical education teachers will be expected to help their students.

Pre-service Physical Education teachers must continue to development, obtain new knowledge and remain abreast of new developments in the field in order to provide high quality instructions to their students. Castelli and Williams (2007, ( the effectiveness of professional development is compromised by the amount of teacher responsibilities as well as the accelerating pace of first aid and primary injury management knowledge keep abreast of new developments. With regard to years of educational experiences, no significant differences were found on the first aid and primary injury management test scores between first year masters students and second year masters students.

### 5. Summary, Conclusions and Recommendations

#### 5.1 Summary

National content standards suggest that physical education instruction should provide students with an understanding of how to achieve knowledge enhancing level about first aid and primary injury management as well as regular

participation in developmental courses. It is crucial that Physical Education teachers be knowledgeable and confident in their own content knowledge about first aid and primary injury management to provide high quality and effective instruction to their students. This study examined teacher content knowledge about first aid and primary injury management of pre-service PE teachers.

After the test was piloted and revised by discussing with guide. Teacher's demographic characteristics such as gender, and years of educational experiences were collected as a part of this study. Reliability analysis indicated that the first aid and primary injury management test have a Spearman's reliability coefficient of .965 which is commonly considered low level of internal consistency. Teacher scores were computed for the overall first aid and primary injury management content knowledge test performance and expressed as mean percentages. Mann - Whitney U Test was used to examine the influence of years of educational experiences on first aid and primary injury management content knowledge. The first aid and primary injury management content knowledge test was developed. Please refer to Appendix B for complete version of the test.

#### 5.2 Conclusions

Based on the findings of this study, the following conclusions were made :

- 1) The first aid and primary injury management test appeared to be a valid and reliable measure of teacher content knowledge about first aid and primary injury management of pre-service Physical Education teacher .
- 2) Years of educational experiences influenced teacher content knowledge about first aid and primary injury management of pre-service Physical Education teachers.
- 3) Even if second year student performance move , oral pre-service teachers' performance was found to be very low on the first aid and primary injury management content knowledge test. Thus is can be concluded that the pre-service teacher's knowledge about first aid is poor and Physical education teacher education program should take a servicenote.

#### 5.3 Recommendations for Further Research

Future research on the topics considered in this study includes the following:

- 1) Physical Education Teacher Education Programs should be evaluated to determine if content knowledge of appropriate first aid and primary injury management is pertinent for future physical education teachers.
- 2) The effectiveness of professional development should be evaluated in future studies.
- 3) Pre-service physical education majors should be assessed on teacher content knowledge about first aid and primary injury management and compared with in service PE teachers.

#### References

- [1] Adams, A.L. & Schiff, M.A. (2006). Childhood soccer injuries treated in u.s. emergency departments. Society of Academic Emergency Medicine, 13(5), 571-574.

- [2] Ajmer, S., Jagdish, B., Jagtar, G., Nirmaljit, R. (2003). Essentials of Physical Education. New delhi: Kalyani Publisher.
- [3] Asad Abbas, Syeda Ismat Bukhari, Farah Ahmad (2011) knowledge of first aid and basic life support amongst medical students a comparison between trained and non-trained students  
[www.academia.edu/Documents/in/First\\_Aid\\_Knowledge](http://www.academia.edu/Documents/in/First_Aid_Knowledge).
- [4] Ayers, S. F. (2002). Assessing sub-disciplinary concept knowledge of pre service physical education teachers,34,2-16
- [5] Best, J.w. & J.v. (2006) . Research in Education. (10th ed.). New Delhi: Prentice Hall.
- [6] Castelli, D. & Williams, L. (2007). Health-related fitness and physical education teachers content knowledge. Journal of Teaching in Physical Education, 26,3-19.
- [7] Dowdell, T.(2003, Augst22).First aid medical Information.<http://www.disabled-world.com/medical/first-aid/#sthash.3SxlrTQh.dpuf>
- [8] Fernandes Errika. (2014) . Physical activity and health related fitness content knowledge of Pre-service physical education teachers unpublished master dissertation. University of pune , pune.
- [9] Freddie Fu., David Stone. (2001). Sport injuries mechanisms, prevention, treatment. Philadelphia.
- [10] Hart, M. A. (2005). Influence of a physical education methods course elementary education majors' knowledge of fundamental movement skills.22,4-17
- [11] Hastie. P.A. & Maisavijevic. N. (1999). The relationship between subject- matter expertise and accountability in instructional tasks. Journal of Teaching in Physical Education11,5-18
- [12] Kansal. D.K. (2008). Textbook of Applied Measurement Evaluation & Sports Selection (2nd Ed.). New Delhi. Dvs Publication.
- [13] Losch. s. H. & Strand. B. (2004). An analysis of the knowledge and fitness levels of physical education teacher education majors. Research Quarterly for Exercise and Sport.17,2-16
- [14] Lynnette Castro (2010 ) Assessment first aid knowledge and decision makink of coaches of youth soccer. scholarworks.sjsu.edu/cgi/viewcontent.cgi?article=4748 &context=etd\_theses.
- [15] Mariusz Goniewicz (2012)First Aid education in the opinion of secondary school students. link.springer.com/article/10.2478/s11536-012-0048-2.
- [16] Mewborn, D. S. (2000, April). An analysis of the research on k-8 teachers' mathematical knowledge.27,3-18
- [17] Miller, M. G. & Housner, L. (1998). A survey of health-related fitness knowledge among preservice and in-service physical educators. The Physical Educator.62,49-55.
- [18] Miller. D. K. (2002). Measurement by the Physical Educator: Why and How (4th Ed.) New York: Mcgraw-Hill.
- [19] Necati Hirça (2012) Does teachers' Knowledge Meet First Aid Needs of Turkish Schools Review of Turkish Literatureh [www.academia.edu/1975309/Does\\_teachers\\_Knowledge\\_Meet\\_First\\_Aid\\_Nee](http://www.academia.edu/1975309/Does_teachers_Knowledge_Meet_First_Aid_Nee).
- [20] Norman, G., Stephen.,J.(1996). Bailliere's handbook of first aid. Delhi:A.I.T.B.S.
- [21] Petersen, s., Byrne, H. & Cruz, L. (2003). The reality of fitness for pre-service teachers.
- [22] Redfearn, R.W. (1980). Emergency medical skills in high school coaches. The Physician and Sportsmedicine, 8(11), 115-116.
- [23] Rowe, P.J. & Miller, L.K. (1991). Treating high school sports injuries: Are coaches/trainers competent? Journal of Physical Education, Recreation & Dance, 62(1), 49-54.
- [24] Santiago, J.A. (2008) Differences In Physical Activity and Health-Related Fitness Content Knowledge of in-service Elementary Physical Education Teachers unpublished Doctoral dissertation, Texas Southern University. 22,3-19.
- [25] Shulman L. S. (1986). Shulman L s. (1986). Those who understand: Knowledge growth in teaching. Educational Research.
- [26] Siedentop, D. (2002). Content knowledge for physical education. Journal of Teaching in Physical Education.21,368-377
- [27] Wilkins, J. (2002). The impact of teachers content knowledge and attitudes on instructional beliefs and practices.<http://eric.ed.gov/?id=ED471775>
- [28] Wright, L (2000). Practical knowledge. performance, and physical education. Quest.<http://eric.ed.gov/?id=EJ612250>.