

The copyright © of this thesis belongs to its rightful author and/or other copyright owner. Copies can be accessed and downloaded for non-commercial or learning purposes without any charge and permission. The thesis cannot be reproduced or quoted as a whole without the permission from its rightful owner. No alteration or changes in format is allowed without permission from its rightful owner.



**DETERMINANTS OF NURSES' PAIN MANAGEMENT
PRACTICES IN JORDAN: THE MODERATING ROLE OF
PATIENT'S BARRIERS**

BASHAR ISAM ALZGHOUL



UUM
Universiti Utara Malaysia

**DOCTOR OF PHILOSOPHY
UNIVERSITI UTARA MALAYSIA
April 2016**

**DETERMINANTS OF NURSES' PAIN MANAGEMENT PRACTICES IN
JORDAN: THE MODERATING ROLE OF PATIENT'S BARRIERS**

By
BASHAR ISAM ALZGHOUL



UUM
Universiti Utara Malaysia

**Thesis Submitted to
School of Business Management
Universiti Utara Malaysia,
in Fulfillment of the Requirement for the Degree of Doctor of Philosophy**

PERMISSION TO USE

In presenting this thesis in fulfillment of the requirements for a Post Graduate degree from the Universiti Utara Malaysia (UUM), I agree that the Library of this university may make it freely available for inspection. I further agree that permission for copying this thesis in any manner, in whole or in part, for scholarly purposes may be granted by my supervisor(s) or in their absence, by the Dean of School of Business Management where I did my thesis. It is understood that any copying or publication or use of this thesis or parts of it for financial gain shall not be allowed without my written permission. It is also understood that due recognition shall be given to me and to the UUM in any scholarly use which may be made of any material in my thesis.

Request for permission to copy or to make other use of materials in this thesis in whole or in part should be addressed to:



Dean of School of Business Management
Universiti Utara Malaysia
06010 UUM Sintok
Kedah Darul Aman

Universiti Utara Malaysia

ABSTRACT

In spite of the significant advancement in methods and tools associated with pain management, there is still a deficiency in the pain management practices. Therefore, the aim of this study is to empirically determine the level of pain management practices, evaluate the significant predictors of pain management practices (i.e. knowledge, attitude, subjective norm and self-efficacy), examine the moderating effect of patient barriers on the relationship between the predictors and the pain management practices, and to investigate the applicability of Field theory in explaining the pain management practices in Jordan. Six latent variables were involved including five exogenous and one endogenous variables and a cross-sectional survey was used in conducting the study. The instrument is consisted of 93 items adapted from the previous studies. The questionnaires were distributed to 600 nurses in 13 hospitals located in the central region of Jordan. The nurses were selected at random using a multistage cluster technique. Of 600, only 307 questionnaires were returned and used for analysis. Data collection was carried out for the period of six months from October 2014 until March 2015. Data were analyzed using partial least squares-structural equation modeling (PLS-SEM). The findings support the majority of the hypothesized relationships, specifically the hypothesized direct effects of attitude, self-efficacy, knowledge, and subjective norms on the pain management practices. In addition, patient-related barriers moderate one of these relationships. That is, the relationship between attitudes towards the pain management and the pain management practices is weaker for nurses who perceived high barriers from their patients as opposed to nurses who perceived low patient-related barriers. Collectively, the determinant variables of pain management practices accounted for 78% of the variance in the pain management practices. Theoretical, methodological, and practical implications are discussed.

Keywords: Pain management practices, Knowledge, Attitude, Self-efficacy, Subjective norm, Patients barriers, Jordanian hospitals

ABSTRAK

Walaupun terdapat kemajuan yang ketara dalam kaedah dan alat-alat yang berkaitan dengan pengurusan sakit, namun masih terdapat kekurangan dalam amalan pengurusan sakit. Oleh itu, tujuan kajian ini adalah untuk menentukan secara empirikal tahap amalan pengurusan sakit, menilai peramal yang ketara dalam amalan pengurusan sakit (iaitu pengetahuan, sikap, norma subjektif dan keberkesanan diri), memeriksa kesan penyederhana halangan pesakit mengenai hubungan antara peramal dan amalan pengurusan sakit, dan menyiasat kesesuaian teori Field dalam menerangkan amalan pengurusan sakit di Jordan. Enam pemboleh ubah pendam terlibat termasuk lima eksogenus dan satu pemboleh ubah endogen. Kajian rentas telah digunakan dalam menjalankan kajian ini. Alatan kajian terdiri daripada 93 item yang telah diadaptasi daripada kajian sebelumnya. Soal selidik telah diedarkan kepada 600 jururawat di 13 hospital yang terletak di tengah Jordan. Jururawat telah dipilih secara rawak menggunakan teknik kelompok berbilang. Dari 600, hanya 307 soal selidik telah berjaya dikembalikan untuk dianalisis. Pengumpulan data telah dijalankan bagi tempoh enam bulan iaitu dari Oktober 2014 hingga Mac 2015. Data telah dianalisis menggunakan model separa persamaan kuasa dua struktur (PLS-SEM). Hasil kajian menyokong majoriti hubungan hipotesis, khususnya kesan langsung hipotesis sikap, keberkesanan diri, pengetahuan, dan norma subjektif mengenai amalan pengurusan sakit. Di samping itu, halangan berkaitan dengan pesakit menyederhana satu daripada hubungan ini, iaitu, hubungan antara sikap terhadap pengurusan sakit dan amalan pengurusan sakit adalah lebih lemah untuk jururawat yang menerima halangan yang tinggi dari pesakit mereka berbanding dengan jururawat yang menerima halangan yang rendah berkaitan dengan pesakit. Secara kolektif, pemboleh ubah penentu amalan pengurusan sakit menyumbang 78% daripada kepelbagaian dalam amalan pengurusan sakit. teori, metodologi, dan implikasi praktikal turut dibincangkan.

Kata kunci: Amalan pengurusan sakit, Pengetahuan, Sikap, Keberkesanan Diri, Norma subjektif, Halangan pesakit, Hospital Jordan

ACKNOWLEDGEMENT

In the name of ALLAH, the most gracious, the most merciful. Praise be to ALLAH, the creator and custodian of the universe. Salawat and Salam to our Prophet Muhammad, peace and blessings of ALLAH be upon him and to his family members, companions and followers.

First and foremost, I thank Allah (S.W.T) for bestowing me with the much-needed patience, perseverance, and persistence to accomplish this study. Second, I would like to acknowledge my supervisor, Dr. Nor Azimah Chew Abdullah, for her assistance, support, guidance, and encouragement during all the stages of my doctoral study. Also, I would like to express my heartfelt gratitude to my wife, Isra'a, and to my son, Hamzah, for their constant love and support. Additionally, I would also like to thank my parents, Isam and Hana, for their encouragement and instilling in me the value of education. Finally, I would like to thank my brothers, Mohammad and Loay, and to my sister, Sana'a, who were so supportive during my years of study.

TABLE OF CONTENTS

	Page
TITLE PAGE	i
CERTIFICATION OF THIS WORK	ii
PERMISSION TO USE	iv
ABSTRACT	v
ABSTRAK	vi
ACKNOWLEDGEMENT	vii
TABLE OF CONTENTS	viii
LIST OF TABLES	xii
LIST OF FIGURES	xiv
LIST OF APPENDICES	xv
LIST OF ABBREVIATIONS	xvi
CHAPTER ONE: INTRODUCTION	1
1.1 Background of the Study	1
1.2 Problem Statement	5
1.3 Research Questions	10
1.4 Research Objectives and Study Aim	11
1.5 Scope of the Study	11
1.6 Significance of the Study	13
1.7 Summary and Overview of the Thesis	16
CHAPTER TWO: LITERATURE REVIEW	18
2.1 Introduction	18
2.2 Contextual Information regarding Healthcare Sector in Jordan.....	18
2.3 Overview of Pain.....	21
2.3.1 Pain Theories	23
2.4 Overview of Pain Management	24
2.4.1 Pain Assessment Phase	24
2.4.2 Pharmacological and Non-pharmacological Intervention Phase	25
2.4.3 Pain Reassessment Phase	29
2.5 Underpinning Theory	36
2.5.1 Field Theory.....	36
2.6 Review of Past Studies	38
2.6.1 Pain Management Practices	39

2.6.2 Attitude towards Pain Management.....	45
2.6.3 Relationship between Attitude towards Pain Management and Pain Management Practices	48
2.6.4 Self-efficacy of Pain Management	52
2.6.5 Relationship between Self-efficacy of Pain Management and Pain Management Practices	53
2.6.6 Knowledge of Pain Management.....	55
2.6.7 Relationship between Knowledge of Pain Management and Pain Management Practices.....	59
2.6.8 Subjective Norm towards Pain Management.....	62
2.6.9 Relationship between Subjective Norm towards Pain Management and Pain Management Practices	63
2.6.10 Moderator Effect of Patient-related Barriers	65
2.7 Literature Gap and Contributions.....	70
2.8 Chapter Summary.....	73
CHAPTER THREE: THEORETICAL FRAMEWORK AND RESEARCH METHODOLOGY.....	74
3.1 Introduction	74
3.2 Research Design	74
3.3 Population, Sample Size and Sampling Technique.....	76
3.3.1 Population.....	76
3.3.2 Sample Size.....	78
3.3.3 Sampling Technique	80
3.4 Research Framework.....	89
3.5 Hypotheses of the Study.....	91
3.5.1 Attitude towards Pain Management and Pain Management Practices	91
3.5.2 Self-efficacy of Pain Management and Pain Management Practices	92
3.5.3 Knowledge of Pain Management and Pain Management Practices	94
3.5.4 Subjective Norm towards Pain Management and Pain Management Practices	95
3.5.5 Moderator Effect of Patient-related Barriers	96
3.5.6 Summary of Hypotheses.....	99
3.6 Operational Definition of the Study Variables.....	100
3.7 Data Collection.....	101
3.8 Instrumentation.....	103
3.9 Pre-testing of the Questionnaire	109

i. Content Validity.....	109
ii. Face Validity.....	110
3.10 Data Analysis	110
i. Descriptive Analysis.....	111
ii. Partial Least Squares (PLS) Technique	111
3.11 Ethical Considerations.....	112
3.12 Chapter Summary	113
CHAPTER FOUR: DATA ANALYSIS	114
4.1 Introduction	114
4.2 Response Rate	115
4.3 Data Screening and Preliminary Analysis.....	116
4.3.1 Missing Value Analysis	116
4.3.2 Assessment of Outliers	117
4.3.3 Normality Test	119
4.3.4 Multicollinearity Test	123
4.4 Non-Response Bias	126
4.5 Common Method Variance	129
4.6 Descriptive Statistics	131
4.6.1 Descriptive Statistics for Participants' Profile	131
4.6.2 Descriptive Statistics for Questionnaire Constructs	132
4.7 Assessment of Pain Management Practices Level	133
4.8 Assessment of PLS-SEM Path Model Results	136
4.8.1 Outer Model Evaluation.....	137
4.8.2 Inner Model Evaluation	147
4.9 Summary of Findings	158
4.10 Chapter Summary	159
CHAPTER FIVE: DISCUSSION AND CONCLUSION	161
5.1 Introduction	161
5.2 Recapitulation of the Study's Findings	161
5.3 Discussion of Research Findings	163
5.3.1 Nurses' Pain Management Practices Level	163
5.3.2 Attitude towards Pain Management and Pain Management Practices	164
5.3.3 Self-efficacy of Pain Management and Pain Management Practices	166
5.3.4 Knowledge of Pain Management and Pain Management Practices	167

5.3.5 Subjective Norms towards Pain Management and Pain Management Practices	169
5.3.6 Moderating Effect of Patients-related Barriers.....	170
5.4 Implications of the Study	172
5.4.1 Practical Implications	173
5.4.2 Theoretical Implications	174
5.5 Limitations and Future Research Directions	177
5.6 Conclusions	179
REFERENCES.....	180



UUM
Universiti Utara Malaysia

LIST OF TABLES

Table	Page
Table 2. 1 Summary of Previous Studies on the Relationship between Attitude and Pain Management Practices.....	51
Table 2. 2 Summary of Previous Studies on the Relationship between Self-Efficacy of Pain Management and Intention to Perform Pain Management	54
Table 2. 3 Summary of Previous Studies on the Relationship between Knowledge of Pain Management and Pain Management Practices.....	61
Table 2. 4 Summary of Previous Studies on the Relationship between Subjective Norm towards Pain Management and Intention to Perform Pain Management.....	65
Table 3. 1 Types of Hospitals, Number of Hospitals and Beds in Jordanian Health Sectors (2012)	77
Table 3. 2 Number of Registered Nurses in Each Category of the Public Sector.....	78
Table 3. 3 Cluster Sampling Technique Steps	84
Table 3. 4 Number of Registered Nurses and Population for Each Hospital in the Public Sector at Central Province of Jordan.....	88
Table 3. 5 Summary of the Study Hypotheses.....	100
Table 3. 6 Operational Definitions for the Study Variables.....	101
Table 3. 7 Summary of Original and Direct Sources of Each Variable Scale	105
Table 4. 1 Response Rate of the Questionnaire	115
Table 4. 2 Number and Percentage of Missing Values.....	117
Table 4. 3 Univariate Outlier Test (z-score)	118
Table 4. 4 Multivariate Outlier Detected and Removed	119
Table 4. 5 Correlation Matrix of the Exogenous Latent Constructs	125
Table 4. 6 Tolerance and Variance Inflation Factors (VIF).....	126
Table 4. 7 Results of Independent-Samples T-test for Non-Response Bias	128
Table 4. 8 Demographic Characteristics of Participants.....	132
Table 4. 9 Descriptive Statistics of Latent Variables	133
Table 4. 10 Learning Outcomes of Multiple Choice Examinations	133
Table 4. 11 Frequency, Percentage, Minimum and Maximum Score, Mean, and Standard Deviation of the Level of Nurses' Pain Management Practices (N = 266).....	135
Table 4. 12 Frequency and Percentage of the Five Highest Orders of "Constantly" and the Five Highest Orders of "Never" of Nurses' Pain Management Practices (N = 266)	136
Table 4. 13 Composite Reliability	140
Table 4. 14 Average Variance Extracted	142

Table	Page
Table 4. 15 Latent Variable Correlations and Square Roots of Average Variance Extracted.....	144
Table 4. 16 Loadings, Composite Reliability, and Average Variance Extracted	145
Table 4. 17 Structural Model Assessment with Moderator (Full Model)	149
Table 4. 18 Variance Explained in the Endogenous Latent Variable	151
Table 4. 19 Effect Sizes of the Exogenous Latent Variables on Endogenous Latent Variable Based on Cohen’s (1988) Guideline.....	152
Table 4. 20 Construct Cross-validated Redundancy for Endogenous Latent Variable.	154
Table 4. 21 Strength of the Moderating Effects Based on Cohen’s (1988) Guideline .	157
Table 4. 22 Summary of Hypotheses Testing	158

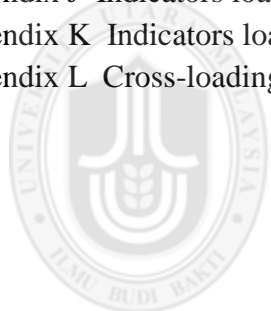


LIST OF FIGURES

Figure	page
Figure 2. 1 Percentage of beds in each health sector of the total number of hospital beds in Jordan	20
Figure 2. 2 Numeric pain rating scale	30
Figure 2. 3 Visual analog pain scale	30
Figure 2. 4 Verbal numeric rating scale	31
Figure 2. 5 Verbal descriptor scale	31
Figure 2. 6 Wong-Baker faces pain rating scale	32
Figure 2. 7 Field theory model.....	37
Figure 2. 8 Linking of the study framework with field theory model.....	38
Figure 3. 1 Provinces of Jordan	83
Figure 3. 2 Theoretical framework of the present study	90
Figure 4. 1 Histogram and normal probability plots	121
Figure 4. 2 Linearity graph.....	122
Figure 4. 3 Homoscedasticity test	123
Figure 4. 4 A two-step process of PLS path model assessment.....	137
Figure 4. 5 Measurement model	139
Figure 4. 6 The structural model with moderator (full model)	148
Figure 4. 7 The moderating effect of patients' barriers on the relationship between attitude towards pain management and pain management practices.....	155

LIST OF APPENDICES

Appendix	page
Appendix A Approval letter from Universiti Utara Malaysia to start data collection..	242
Appendix B Approval letter to collect data from Military Hospitals (King Hussein Medical Center & Prince Hashem Bin Al_Hussein hospital).....	243
Appendix C Approval letter to collect data from hospitals belonging to Jordanian Ministry of Health.....	244
Appendix D The researcher's access card to the Military Hospitals (Security Clearance), clarifying the beginning and ending dates	255
Appendix E Survey Questionnaire.....	256
Appendix F Statistical normality test.....	264
Appendix G The levels of nurses' pain management practices	269
Appendix H The complete ranking orders of pain management practices	273
Appendix I Indicators loadings after individual item reliability	274
Appendix J Indicators loadings after convergent validity	277
Appendix K Indicators loadings after discriminant validity	279
Appendix L Cross-loadings measure based on Chin (1998).....	281



UUM
Universiti Utara Malaysia

LIST OF ABBREVIATIONS

AHCPR	Agency for Health Care Policy and Research
AMDA	American Medical Directors Association
BPS	British Pain Society
CME	Continuous Medical Education
CMV	Common Method Variance
EM	Expectation–Maximization
IASP	International Association for the Study of Pain
IM	Intramuscular
JCAHO	Joint Commission on Accreditation of Healthcare Organizations
JMoH	Jordan Ministry of Health
JRMS	Jordanian Royal Medical Services
JUH	Jordan University Hospital
KAH	King Abdullah University Hospital
KAP	Knowledge-Attitude-Practice
MOH	Ministry of Health
NSAIDs	Non-Steroidal Anti-Inflammatory Drugs
PLS	Partial Least Squares
ONS	Oncology Nursing Society
PRN	<i>pro re nata</i> , a Latin phrase meaning "as needed"
PSUs	Primary Sampling Units
RMS	Royal Medical Services
RNAO	Registered Nurses Association of Ontario

LIST OF ABBREVIATIONS (CONTINUE)

SASA	South African Society of Anesthesiologists
SEM	Structural Equation Modeling
SPSS	Statistical Package for Social Sciences
TPB	Theory of Planned Behavior
UNRWA	United Nations Relief and Works Agency
VIF	Variance Inflation Factors
WHO	World Health Organization



UUM
Universiti Utara Malaysia

CHAPTER ONE INTRODUCTION

1.1 Background of the Study

Pain is one of the most common symptoms experienced by patients (Clinical Standards Advisory Group [CSAG], 1999; Gloth, 2001; Horbury, Henderson & Bromley, 2005; Strong, Unruh, Wright, & Baxter, 2002; Van den Beuken-van Everdingen et al., 2007). Approximately 79 percent of hospitalized patients is suffering from it (Lui, So & Fong, 2008). According to the International Association for the Study of Pain [IASP] (2012, p. 1), pain is defined as “unpleasant sensory or emotional experience associated with actual or potential tissue damage, or described in terms of such damage”.

Nurses are not the only health care providers responsible to relieve a patient's pain (Government of Western Australia Department of Health, 2013; McMillan, Tittle, Hagan, Laughlin & Tabler, 2000), but they have a key role in managing the patient's pain (Lewthwaite et al., 2011; Ung, Salamonson, Hu & Gallego, 2015; Zalon, 1995). This owes to the fact that the nurses are in a central position between the responsible physicians and their patients (Jacox et al., 1994; Lellan, 1997; McCaffery & Pasero, 1999; Registered Nurses Association of Ontario [RNAO], 2013; Schafheutle, Cantrill, & Noyce, 2001). Furthermore, the nurses spend most of their time with patients to offer appropriate health care services (Coulling, 2005; Lui et al., 2008). One of the most recurrent health care services provided by the nurses is pain management (Brown, Bowman & Eason, 1999), so the nurses should handle it as the ‘fifth vital sign’ alongside blood pressure, temperature, breathing and pulse rate (Merboth & Barnason,

The contents of
the thesis is for
internal user
only

REFERENCES

- Abdalrahim, M. S., Majali, S. A., & Bergbom, I. (2008). Documentation of postoperative pain by nurses in surgical wards. *Acute Pain, 10*(2), 73-81.
<http://dx.doi.org/10.1016/j.acpain.2008.04.001>
- Abdalrahim, M. S., Majali, S. A., Stomberg, M. W., & Bergbom, I. (2011). The effect of postoperative pain management program on improving nurses' knowledge and attitudes toward pain. *Nurse Education in Practice, 11*(4), 250-255.
<http://dx.doi.org/10.1016/j.nepr.2010.11.016>
- Abrahamson, K., Arling, P., & Gillette, J. (2012). Does self-efficacy influence the application of evidence-based practice: A survey and structural equation model. *Journal of Nursing Education and Practice, 3*(5), p1.
<http://dx.doi.org/10.5430/jnep.v3n5p1>
- Abushaikha, L. A. (2007). Methods of coping with labor pain used by Jordanian women. *Journal of Transcultural Nursing, 18*(1), 35-40.
<http://dx.doi.org/10.1177/1043659606294194>
- Agency for Health Care Policy and Research. (1992). *A cute pain management: operative or medical procedures and trauma*. Retrieved from <http://www.ncbi.nlm.nih.gov/books/NBK52153/>
- Agency for Health Care Policy and Research. (2002). *Management of cancer symptoms: Pain, depression, and fatigue*. AHRQ Publication No. 02-E032. Retrieved from <http://archive.ahrq.gov/downloads/pub/evidence/pdf/cansymp/cansymp.pdf>

- Aisuodionoe-Shadrach, O. I., Olapade-Olaopa, E. O., & Soyannwo, O. A. (2006). Preoperative analgesia in emergency surgical care in Ibadan. *Tropical Doctor*, 36(1), 35-36. <http://dx.doi.org/10.1258/004947506775598789>
- Ajzen, I. (1985). *From intentions to actions: A theory of planned behavior* (pp. 11-39). Springer Berlin Heidelberg.
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179-211. [http://dx.doi.org/10.1016/0749-5978\(91\)90020-t](http://dx.doi.org/10.1016/0749-5978(91)90020-t)
- Ajzen, I. (June 6, 2016). Icek Ajzen, Professor of Psychology, University of Massachusetts. Retrieved from <http://people.umass.edu/aizen/faqtxt.html>
- Ajzen, I., & Fishbein, M. (1980). *Understanding attitudes and predicting social behaviour*. Englewood Cliffs, NJ: Prentice-Hall.
- Akuma, A. O., & Jordan, S. (2012). Pain management in neonates: a survey of nurses and doctors. *Journal of advanced nursing*, 68(6), 1288-1301. <http://dx.doi.org/10.1111/j.1365-2648.2011.05837.x>
- Al Qadire, M., & Al Khalaileh, M. (2012). Jordanian nurses knowledge and attitude regarding pain management. *Pain Management Nursing*. 15(1), 220-228. <http://dx.doi.org/10.1016/j.pmn.2012.08.006>
- American Medical Directors Association. (2012). *Pain management in the long term care setting*. American Medical Directors Association (AMDA). Retrieved from <https://www.guideline.gov/content.aspx?id=45524>

- Al Samaraee, A., Rhind, G., Saleh, U., & Bhattacharya, V. (2010). Factors contributing to poor post-operative abdominal pain management in adult patients: A review. *The Surgeon*, 8(3), 151-158. <http://dx.doi.org/10.1016/j.surge.2009.10.039>
- Al-Atiyyat, N. M. H. (2008). Patient-related barriers to effective cancer pain management. *Journal of Hospice & Palliative Nursing*, 10(4), 198-204. <http://dx.doi.org/10.1097/01.njh.0000319161.97477.b0>
- Alcenius, M. (2004). Successfully meet pain assessment standards. *Nursing Management*, 35(3), 12. <http://dx.doi.org/10.1097/00006247-200403000-00005>
- Al-Hassan, M. A., & Omran, S. M. (2005). The effects of health beliefs on health care-seeking decisions of Jordanian patients with myocardial infarction symptoms. *International Journal of Nursing Practice*, 11(1), 13-20. <http://dx.doi.org/10.1111/j.1440-172x.2005.00497.x>
- Al-Hassan, M., & Hweidi, I. (2004). The perceived needs of Jordanian families of hospitalized, critically ill patients. *International Journal of Nursing Practice*, 10(2), 64-71. <http://dx.doi.org/10.1111/j.1440-172x.2003.00460.x>
- Al-Hassan, M., Alkhalil, M. S., & Al Ma'Aitah, R. (1999). Jordanian nurses' roles in the management of postoperative pain in the postanesthesia care unit. *Journal of PeriAnesthesia Nursing*, 14(6), 384-389. [http://dx.doi.org/10.1016/s1089-9472\(99\)80101-4](http://dx.doi.org/10.1016/s1089-9472(99)80101-4)

Ali, H. S., Ibrahim, Y., & Mohamed, E. (2013). Non-Pharmacological Pain Management: Nurses' Knowledge, Attitudes and Practices in selected Hospitals at Makkah El-Mukarramah. *Life Science Journal*, 2, 10. Retrieved from http://www.lifesciencesite.com/lj/life1002/184_18276life1002_1327_1335.pdf

Al-Khawaldeh, O. A., Al-Hussami, M., & Darawad, M. (2013). Knowledge and attitudes regarding pain management among Jordanian nursing students. *Nurse Education Today*, 33(4), 339-345. <http://dx.doi.org/10.1016/j.nedt.2013.01.006>

Alley, L. G. (2001). The influence of an organizational pain management policy on nurses' pain management practices. *Oncology Nursing Forum*, 28(5), 867-874. Retrieved from <http://europepmc.org/abstract/med/11421146>

Al-Ma'aitah, R. M., & Gharaibeh, M. M. (2000). Perception of Jordanian male nursing students about caring for children in the pediatric units after graduation. *Journal of pediatric nursing*, 15(3), 198-203. [http://dx.doi.org/10.1016/s0882-5963\(00\)70012-1](http://dx.doi.org/10.1016/s0882-5963(00)70012-1)

Al-Makhamreh, S. (2005). *Social work as an emerging profession in the Middle East : An ethnographic case study of Jordanian hospital social work* (PhD dissertation). University of Warwick, Coventry.

Alrai Newspaper (2012, March). *الخصاونة يؤكد اهتمام الأردن بتحسين الرعاية الصحية للمواطنين*. Alrai Newspaper. Amman, Alrai. Retrieved from <http://www.alrai.com/article/498978.html>

- Al-Shaer, D., Hill, P. D., & Anderson, M. A. (2011). Nurses' knowledge and attitudes regarding pain assessment and intervention. *Medsurg Nursing*, 20(1), 7-11. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/21446289>
- Andersson, E. P. (1993). The perspective of student nurses and their perceptions of professional nursing during the nurse training programme. *Journal of Advanced Nursing*, 18(5), 808-815. <http://dx.doi.org/10.1046/j.1365-2648.1993.18050808.x>
- Apfelbaum, J. L., Chen, C., Mehta, S. S., & Gan, T. J. (2003). Postoperative pain experience: Results from a national survey suggest postoperative pain continues to be undermanaged. *Anesthesia & Analgesia*, 97(2), 534-540. <http://dx.doi.org/10.1213/01.ane.0000068822.10113.9e>
- Arathuzik, D. (1991). Pain experience for metastatic breast cancer patients: Unraveling the mystery. *Cancer Nursing*, 14(1), 41-48. <http://dx.doi.org/10.1097/00002820-199102000-00007>
- Armitage, C. J., & Conner, M. (2001). Efficacy of the theory of planned behaviour: A meta-analytic review. *British Journal of Social Psychology*, 40(4), 471-499. <http://dx.doi.org/10.1348/014466601164939>
- Armstrong, J. S., & Overton, T. S. (1977). Estimating Nonresponse Bias in Mail Surveys. *Journal of Marketing Research* 14(3), 396-402. Retrieved from http://repository.upenn.edu/cgi/viewcontent.cgi?article=1024&context=marketing_papers

- Aziato, L., & Adejumo, O. (2014). Determinants of nurses' knowledge gap on pain management in Ghana. *Nurse education in practice*, 14(2), 195-199. <http://dx.doi.org/10.1016/j.nepr.2013.08.004>
- Bagley, C. S., Falinski, E., Garnizo, N., & Hooker, L. (1982). Pain management: A pilot project. *Cancer Nursing*, 5(3), 191-200. <http://dx.doi.org/10.1097/00002820-198206000-00003>
- Baker, M., Collett, B., & Fischer, A. (2014). *Improving the current and future management of chronic pain: A European Consensus Report*. Retrieved from http://www.efic.org/userfiles/file/pain_proposal.pdf
- Bandolier. (2007). The Oxford Pain Internet Site. Retrieved from <http://www.medicine.ox.ac.uk/bandolier/booth/painpag/index2.html>
- Bandura, A. (1977). Self-efficacy: toward a unifying theory of behavioral change. *Psychological Review*, 84(2), 191-215. <http://dx.doi.org/10.1037//0033-295x.84.2.191>
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory* (pp. 5-107). Englewood Cliffs, NJ: Prentice Hall.
- Bandura, A. (1999). A social cognitive theory of personality. In L. Pervin & O. John (Ed.), *Handbook of personality* (2nd ed., pp. 154-196). New York: Guilford Publications. (Reprinted in D. Cervone & Y. Shoda [Eds.], *The coherence of personality*. New York: Guilford Press.)

- Baratta, J. L., Schwenk, E. S., & Viscusi, E. R. (2014). Clinical consequences of inadequate pain relief: barriers to optimal pain management. *Plastic and reconstructive surgery*, *134*(4S-2), 15S-21S.
<http://dx.doi.org/10.1097/prs.0000000000000681>
- Barnett, V., & Lewis, T. (1994). *Outliers in statistical data*. New York: Wiley.
- Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of personality and social psychology*, *51*(6), 1173-1182.
<http://dx.doi.org/10.1037//0022-3514.51.6.1173>
- Bartlett, J. E., Kotrlík, J. W., & Higgins, C. C. (2001). Organizational research: Determining appropriate sample size in survey research appropriate sample size in survey research. *Information Technology, Learning, and Performance Journal*, *19*(1), 43-50. Retrieved from <http://www.opalco.com/wp-content/uploads/2014/10/Reading-Sample-Size.pdf>
- Baruch, Y., & Holtom, B. C. (2008). Survey response rate levels and trends in organizational research. *Human Relations*, *61*(8), 1139-1160.
<http://dx.doi.org/10.1177/0018726708094863>
- Basak, S. (2010). Knowledge and attitudes of nurses and their practices regarding post-operative pain management in Bangladesh (Master dissertation, Prince of Songkla University, Thailand). Retrieved from <http://kb.psu.ac.th/psukb/bitstream/2010/7827/1/320221.pdf>

- Batiha, A. M. (2014). Pain management barriers in critical care units: A qualitative study. *International Journal of Advanced Nursing Studies*, 3(1), 1. <http://dx.doi.org/10.14419/ijans.v3i1.1494>
- Beduz, M. A. (2012). The role of attitudes, subjective norms, perceived behavioural control and context in nurses's behavioural intentions (PhD dissertation, McMaster University, Canada). Retrieved from http://digitalcommons.mcmaster.ca/cgi/viewcontent.cgi?article=8026&context=open_dissertations
- Bell, L., & Duffy, A. (2009). Pain assessment and management in surgical nursing: A literature review. *British Journal of Nursing*, 18(3), 153-159. <http://dx.doi.org/10.12968/bjon.2009.18.3.39042>
- Bernardi, M., Catania, G., Lambert, A., Tridello, G., & Luzzani, M. (2007). Knowledge and attitudes about cancer pain management: A national survey of Italian oncology nurses. *European Journal of Oncology Nursing*, 11(3), 272-279. <http://dx.doi.org/10.1016/j.ejon.2006.09.003>
- Berry, P. H., & Dahl, J. L. (2000). The new JCAHO pain standards: Implications for pain management nurses. *Pain Management Nursing*, 1(1), 3-12. <http://dx.doi.org/10.1053/jpmn.2000.5833>
- Berthier, F., Potel, G., Leconte, P., Touze, M. D., & Baron, D. (1998). Comparative study of methods of measuring acute pain intensity in an ED. *The American Journal of Emergency Medicine*, 16(2), 132-136. [http://dx.doi.org/10.1016/s0735-6757\(98\)90029-8](http://dx.doi.org/10.1016/s0735-6757(98)90029-8)

- Bisbee, G.E., Clark, P.A., Jones, S.I., Wang, E., Watts, C.M. (2011) Profiling Best Practices: Chronic Pain Management in the Leading Health Systems. *Health Management Academy Benchmarking Series*, 1–45. Retrieved from http://www.hmacademy.com/pdfs/Chronic_Pain_Management.pdf
- Blumberg, B., Cooper, D. R., & Schindler, P. S. (2008). *Business research methods* (2nd ed.). London: McGraw-Hill.
- Bogdanovich, V. (2013). Self-determination motivation and perceived barriers in the vegetable eating context (Doctoral dissertation, The University of Guelph, Ontario, Canada). Retrieved from http://dspace.lib.uoguelph.ca:8080/xmlui/bitstream/handle/10214/7385/Bogdanovich_Vera_201308_Msc.pdf?sequence=1&isAllowed=y
- Bookbinder, M., Covle, N., Kiss, M., Goldstein, M. L., Holritz, K., Thaler, H., ... & Portenoy, R. K. (1996). Implementing national standards for cancer pain management: Program model and evaluation. *Journal of Pain and Symptom Management*, 12(6), 334-347. [http://dx.doi.org/10.1016/s0885-3924\(96\)00204-7](http://dx.doi.org/10.1016/s0885-3924(96)00204-7)
- Borenstein, M., Rothstein, H., & Cohen, J. (2001). *Power and precision*. Englewood, NJ: Biostat, Inc.
- Borgatti, P. (1999). *Elements of research: Theoretical framework*. Retrieved from <http://www.analytictech.com/lmb313/elements.htm>

- Borromeo, A. R., & Windle, P. E. (1996). Benchmarking for unrelieved pain in a postanesthesia care unit. *Best Practices and Benchmarking in Healthcare: A Practical Journal for Clinical and Management Application*, 2(1), 20-23. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/9214861>
- Boström, B. (2003). Acute postoperative and cancer-related pain management: Patients experiences and perceptions in relation to health-related quality of life and the multidimensionality of pain (Doctoral dissertation, Lund University, Faculty of Medicine, Lund, Sweden). Retrieved from <https://www.diva-portal.org/smash/get/diva2:239124/FULLTEXT01.pdf>
- Bostrom, M. (1997). Summary of the mayday fund survey: Public attitudes about pain and analgesics. *Journal of Pain and Symptom Management*, 13(3), 166-168. [http://dx.doi.org/10.1016/s0885-3924\(96\)00273-4](http://dx.doi.org/10.1016/s0885-3924(96)00273-4)
- Bower, G. H. (1975). Cognitive psychology: An introduction. In W. K. Estes (Ed.), *Handbook of learning and cognition* (pp. 25-80). Hillsdale, NJ: Erlbaum.
- Brennan, F., Carr, D. B., & Cousins, M. (2007). Pain management: A fundamental human right. *Anesthesia & Analgesia*, 105(1), 205-221. <http://dx.doi.org/10.1213/01.ane.0000268145.52345.55>
- Briggs, M., & Dean, K. L. (1998). A qualitative analysis of the nursing documentation of post-operative pain management. *Journal of Clinical Nursing*, 7(2), 155-163. <http://dx.doi.org/10.1046/j.1365-2702.1998.00125.x>
- Brink, H., Van der Walt, C. & Van Rensburg, G. (2006). *Fundamentals of Research Methodology for Health Care Professionals* (2nd ed.). Cape Town: Juta.

- Brink, P. J., & Wood, M. J. (1997). *Advanced design in nursing research*. Sage Publications.
- Brockopp, D., Downey, E., Powers, P., Vanderveer, B., Warden, S., Ryan, P., & Saleh, U. (2004). Nurses' clinical decision-making regarding the management of pain. *Accident and Emergency Nursing, 12*(4), 224-229. <http://dx.doi.org/10.1016/j.aaen.2004.01.008>
- Broekmans, S., Vanderschueren, S., Morlion, B., Kumar, A., & Evers, G. (2004). Nurses' attitudes toward pain treatment with opioids: A survey in a Belgian university hospital. *International Journal of Nursing Studies, 41*(2), 183-189. [http://dx.doi.org/10.1016/s0020-7489\(03\)00129-9](http://dx.doi.org/10.1016/s0020-7489(03)00129-9)
- Broome, M. E., Richtsmeier, A., Maikler, V., & Alexander, M. A. (1996). Pediatric pain practices: A national survey of health professionals. *Journal of Pain and Symptom Management, 11*(5), 312-320. [http://dx.doi.org/10.1016/0885-3924\(95\)00205-7](http://dx.doi.org/10.1016/0885-3924(95)00205-7)
- Brorson, H., Plymoth, H., Örmon, K., & Bolmsjö, I. (2014). Pain relief at the end of life: nurses' experiences regarding end-of-life pain relief in patients with dementia. *Pain Management Nursing, 15*(1), 315-323. <http://dx.doi.org/10.1016/j.pmn.2012.10.005>
- Brown, D., & McCormack, B. (2006). Determining factors that have an impact upon effective evidence-based pain management with older people, following colorectal surgery: An ethnographic study. *Journal of Clinical Nursing, 15*(10), 1287-1298. <http://dx.doi.org/10.1111/j.1365-2702.2006.01553.x>

- Brown, R. L. (1994). Efficacy of the indirect approach for estimating structural equation models with missing data: A comparison of five methods. *Structural Equation Modeling, 1*(4), 287–316. <http://dx.doi.org/10.1080/10705519409539983>
- Brown, S. T., Bowman, J. M., & Eason, F. R. (1999). Assessment of nurses' attitudes and knowledge regarding pain management. *Journal of Continuing Education in Nursing, 30*(3), 132-139. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/10640072>
- Brunier, G., Carson, G., & Harrison, D. E. (1995). What do nurses know and believe about patients with pain? Results of a hospital survey. *Journal of Pain and Symptom Management, 10*(6), 436-445. [http://dx.doi.org/10.1016/0885-3924\(95\)00020-y](http://dx.doi.org/10.1016/0885-3924(95)00020-y)
- Bucknall, T., Manias, E., & Botti, M. (2007). Nurses' reassessment of postoperative pain after analgesic administration. *The Clinical Journal of Pain, 23*(1), 1-7. <http://dx.doi.org/10.1097/01.ajp.0000210936.50816.49>
- Buscemi, N., Vandermeer, B., & Curtis, S. (2008). The Cochrane Library and procedural pain in children: An overview of reviews. *Evidence-Based Child Health: A Cochrane Review Journal, 3*(2), 260-279. <http://dx.doi.org/10.1002/ebch.225>
- Byrne, A., Morton, J., & Salmon, P. (2001). Defending against patients' pain: A qualitative analysis of nurses' responses to children's postoperative pain. *Journal of Psychosomatic Research, 50*(2), 69-76. [http://dx.doi.org/10.1016/s0022-3999\(00\)00207-5](http://dx.doi.org/10.1016/s0022-3999(00)00207-5)
- Cadden, K. A. (2007). Better pain management. *Nursing Management, 38*(8), 31-36. <http://dx.doi.org/10.1097/01.numa.0000286189.98808.24>

- Cason, C. L., Jones, T., Brock, J., Maese, P., & Milligan, C. (1999). Nurses' knowledge of pain management: Implications for staff education. *Journal for Nurses in Professional Development*, 15(6), 228-235. <http://dx.doi.org/10.1097/00124645-199911000-00001>
- Cavana, R., Delahaye, B. L., & Sekeran, U. (2001). *Applied business research: Qualitative and quantitative methods*. John Wiley & Sons Australia.
- Chatterjee, S., & Yilmaz, M. (1992). A Review of regression diagnostics for behavioral research. *Applied Psychological Measurement*, 16(3), 209-227. <http://dx.doi.org/10.1177/014662169201600301>
- Chen, W. L. (2005). Nurses' and parents' attitudes toward pain management and parental participation in postoperative care of children (Queensland University of Technology, Brisbane, Australia). Retrieved from http://eprints.qut.edu.au/16127/1/Wen-Lin_Chen_Thesis.pdf
- Cherasse, A., Muller, G., Ornetti, P., Piroth, C., Tavernier, C., & Maillefert, J. F. (2004). Tolerability of opioids in patients with acute pain due to nonmalignant musculoskeletal disease. A hospital-based observational study. *Joint Bone Spine*, 71(6), 572-576. <http://dx.doi.org/10.1016/j.jbspin.2003.10.014>
- Chiang, L. C., Chen, H. J., & Huang, L. (2006). Student nurses' knowledge, attitudes, and self-efficacy of children's pain management: Evaluation of an education program in Taiwan. *Journal of Pain and Symptom Management*, 32(1), 82-89. <http://dx.doi.org/10.1016/j.jpainsymman.2006.01.011>

- Chin, W. (2010). How to write up and report PLS analyses. In V. Esposito Vinzi, W. W. Chin, J. Henseler & H. Wang (Eds.), *Handbook of Partial Least Squares* (pp. 655-690): Springer Berlin Heidelberg.
- Chin, W. W. (1998). The partial least squares approach to structural equation modeling. In G. A. Marcoulides (Ed.), *Modern Methods for Business Research* (pp. 295-336). Mahwah, New Jersey: Lawrence Erlbaum Associates.
- Chin, W. W., Marcolin, B. L., & Newsted, P. R. (2003). A partial least squares latent variable modeling approach for measuring interaction effects: Results from a Monte Carlo Simulation study and an electronic-mail emotion/adoption study. *Information Systems Research*, *14*(2), 189-217. <http://dx.doi.org/10.1287/isre.14.2.189.16018>
- Chin, W.W. (1998). Issues and opinion on structural equation modeling. *MIS Quarterly*, *22*, 1, 7-16. Retrieved from http://hbanaszak.mjr.uw.edu.pl/TempTxt/Chin_1998_Issues%20and%20Opinion%20on%20Structural%20Equation%20Modeling.pdf
- Chiu, L. H., Trinca, J., Lim, L. M., & Tuazon, J. A. (2003). A study to evaluate the pain knowledge of two sub-populations of final year nursing students: Australia and Philippines. *Journal of Advanced Nursing*, *41*(1), 99-108. <http://dx.doi.org/10.1046/j.1365-2648.2003.02511.x>
- Choiniere, M., Melzack, R., Girard, N., Rondeau, J., & Paquin, M. J. (1990). Comparisons between patients' and nurses' assessment of pain and medication efficacy in severe burn injuries. *Pain*, *40*(2), 143-152. [http://dx.doi.org/10.1016/0304-3959\(90\)90065-1](http://dx.doi.org/10.1016/0304-3959(90)90065-1)

- Clarke, E. B., French, B., Bilodeau, M. L., Capasso, V. C., Edwards, A., & Empoliti, J. (1996). Pain management knowledge, attitudes and clinical practice: The impact of nurses' characteristics and education. *Journal of Pain and Symptom Management*, 11(1), 18-31. [http://dx.doi.org/10.1016/0885-3924\(95\)00134-4](http://dx.doi.org/10.1016/0885-3924(95)00134-4)
- Cleeland, C. S. (1984). The impact of pain on the patient with cancer. *Cancer*, 54(S2), 2635-2641. [http://dx.doi.org/10.1002/1097-0142\(19841201\)54:2+<2635::aid-cncr2820541407>3.0.co;2-p](http://dx.doi.org/10.1002/1097-0142(19841201)54:2+<2635::aid-cncr2820541407>3.0.co;2-p)
- Cleeland, C. S. (1987). Barriers to the management of cancer pain. *Oncology (Williston Park, NY)*, 1(2 Suppl), 19-26. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/2484445>
- Cleeland, C. S., Gonin, R., Hatfield, A. K., Edmonson, J. H., Blum, R. H., Stewart, J. A., & Pandya, K. J. (1994). Pain and its treatment in outpatients with metastatic cancer. *New England Journal of Medicine*, 330(9), 592-596. <http://dx.doi.org/10.1056/nejm199403033300902>
- Clinical Standards Advisory Group (CSAG) (1999). *Services for patients with pain*. London: Clinical Standards Advisory Group. Retrieved from <http://www.nationalpinaudit.org/media/files/servicesforpatientswithpain.pdf>
- Closs, S. J. (1996). Pain and elderly patients: A survey of nurses' knowledge and experiences. *Journal of Advanced Nursing*, 23(2), 237-242. <http://dx.doi.org/10.1111/j.1365-2648.1996.tb02662.x>

- Coakes, S. J. & Steed, L. G. (2003). *SPSS: analysis without anguish: version 11.0 for Windows*. Brisbane: Jacaranda Wiley.
- Cohen, F. L. (1980). Postsurgical pain relief: Patients' status and nurses' medication choices. *Pain*, 9(2), 265-274. [http://dx.doi.org/10.1016/0304-3959\(80\)90013-5](http://dx.doi.org/10.1016/0304-3959(80)90013-5)
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences*. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Cohen, M. Z., Easley, M. K., Ellis, C., Hughes, B., Ownby, K., Rashad, B. G., ... & Westbrooks, J. B. (2003). Cancer pain management and the JCAHO's pain standards: An institutional challenge. *Journal of Pain and Symptom Management*, 25(6), 519-527. [http://dx.doi.org/10.1016/s0885-3924\(03\)00068-x](http://dx.doi.org/10.1016/s0885-3924(03)00068-x)
- Collier, S., Philips, D., Camp, V., & Kirk, A. (1995). The influence of attitudes to acupuncture on the outcome of treatment. *Acupuncture in Medicine*, 13(2), 74-77. <http://dx.doi.org/10.1136/aim.13.2.74>
- Cooper, D. R., & Schindler, P. S. (2008). *Business research methods* (10th ed.). New York, NY: McGraw-Hill Companies, Ins.
- Cornally, N., & McCarthy, G. (2011). Help-seeking behaviour for the treatment of chronic pain. *British journal of community nursing*, 16(2). 90-98. <http://dx.doi.org/10.12968/bjcn.2011.16.2.90>
- Coulling, S. (2005). Nurses' and doctors' knowledge of pain after surgery. *Nursing Standard*, 19(34), 41-49. <http://dx.doi.org/10.7748/ns2005.05.19.34.41.c3859>

- Cullen, L., Greiner, J., & Titler, M. G. (2001). Pain management in the culture of critical care. *Critical Care Nursing Clinics of North America*, 13(2), 151-166. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/11866399>
- Daibes, M. (2011). "A pain that ruins mountains": A case study of factors influencing postoperative pain management in two Jordanian hospitals (Doctoral dissertation, University of Warwick, Coventry, England). Retrieved from <http://wrap.warwick.ac.uk/47360/>
- Dar, R., Beach, C. M., Barden, P. L., & Cleeland, C. S. (1992). Cancer pain in the marital system: A study of patients and their spouses. *Journal of Pain and Symptom Management*, 7(2), 87-93. [http://dx.doi.org/10.1016/0885-3924\(92\)90119-3](http://dx.doi.org/10.1016/0885-3924(92)90119-3)
- Darawad, M. W., Al-Hussami, M., Saleh, A. M., & Al-Sutari, M. (2014). Jordanian patients' satisfaction with pain management. *Pain Management Nursing*, 15(1), 116-125. <http://dx.doi.org/10.1016/j.pmn.2012.07.005>
- Desai, P. M. (1999). Pain management and pulmonary dysfunction. *Critical Care Clinics*, 15(1), 151-166. [http://dx.doi.org/10.1016/s0749-0704\(05\)70045-2](http://dx.doi.org/10.1016/s0749-0704(05)70045-2)
- Dhimal, M., Aryal, K. K., Dhimal, M. L., Gautam, I., Singh, S. P., Bhusal, C. L., & Kuch, U. (2014). Knowledge, attitude and practice regarding dengue fever among the healthy population of highland and lowland communities in central Nepal. *PloS one*, 9(7), e102028. <http://dx.doi.org/10.1371/journal.pone.0102028>

- Diekmann, J. M., Engber, D., & Wassem, R. (1989). Cancer pain control: One state's experience. *Oncology Nursing Forum*, 16(2), 219–223. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/2564672>
- Draugalis, J. R., & Plaza, C. M. (2009). Best practices for survey research reports revisited: implications of target population, probability sampling, and response rate. *American journal of pharmaceutical education*, 73(8), 142. <http://dx.doi.org/10.5688/aj7308142>
- Du Pen, S. L., Du Pen, A. R., Polissar, N., Hansberry, J., Kraybill, B. M., Stillman, M., ... & Syrjala, K. (1999). Implementing guidelines for cancer pain management: Results of a randomized controlled clinical trial. *Journal of Clinical Oncology*, 17(1), 361-370. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/10458255>
- Duarte, P., & Raposo, M. (2010). A PLS model to study brand preference: An application to the mobile phone market. In V. Esposito Vinzi, W. W. Chin, J. Henseler & H. Wang (Eds.), *Handbook of Partial Least Squares* (pp. 449-485): Springer Berlin Heidelberg.
- Dunwoody, C. J., Krenzischek, D. A., Pasero, C., Rathmell, J. P., & Polomano, R. C. (2008). Assessment, physiological monitoring, and consequences of inadequately treated acute pain. *Journal of PeriAnesthesia Nursing*, 23(1), S15-S27. <http://dx.doi.org/10.1016/j.jopan.2007.11.007>

- Edwards, H. E., Nash, R. E., Najman, J. M., Yates, P. M., Fentiman, B. J., Dewar, A., ... & Skerman, H. M. (2001). Determinants of nurses' intention to administer opioids for pain relief. *Nursing & Health Sciences*, 3(3), 149-159. <http://dx.doi.org/10.1046/j.1442-2018.2001.00080.x>
- Ely, B. (2001). Pediatric nurses' pain management practice: Barriers to change. *Pediatric Nursing*, 27(5), 473-480. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/12025311>
- Ene, K. W., Nordberg, G., Bergh, I., Johansson, F. G., & Sjöström, B. (2008). Postoperative pain management: The influence of surgical ward nurses. *Journal of Clinical Nursing*, 17(15), 2042-2050. <http://dx.doi.org/10.1111/j.1365-2702.2008.02278.x>
- Erniyati, M. (2002). *Nurses' caring behavior in pain management as perceived by nurses and patients with post-operative pain*. (Master thesis). Prince of Songkla University, Songkhla, Thailand.
- Ersek, M., Irving, G. (2007). Pain, In: Lewis, S., Heitkemper, M., Dirksen, S., O'Brien, P., Bucher, L. (Eds.), *Medical-surgical nursing—assessment and management of clinical problems* (7th ed., pp. 125–150). Mosby.
- Fairbrother, G., Jastrzab, G., Kerr, S., & McInerney, M. (2003). Profiling the 'pain aware' nurse: Acute care nurses' attitudes and knowledge concerning adult pain management. *The Australian Journal of Advanced Nursing*, 21(2), 27-32. Retrieved from <http://www.ajan.com.au/Vol21/Vol21.2-4.pdf>

- Fakhoury, R. (2013, May 15). Number of Syrians in Jordan. *Alrai Newspaper*, Retrieved from <http://www.alrai.com/article/585191.html>
- Farokhzadian, J., & Shahrabaki, P. M. (2014). Survey of Women's Knowledge, Attitude and Practice Regarding Prevention of Common Genital Tract Infection. *Procedia-Social and Behavioral Sciences*, 136, 381-384. <http://dx.doi.org/10.1016/j.sbspro.2014.05.344>
- Faul, F., Erdfelder, E., Lang, A.-G., & Buchner, A. (2007). G*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods*, 39(2), 175-191. <http://dx.doi.org/10.3758/bf03193146>
- Ferrell, B. (2005). Ethical perspectives on pain and suffering. *Pain Management Nursing*, 6(3), 83-90. <http://dx.doi.org/10.1016/j.pmn.2005.06.001>
- Ferrell, B. R., Cohen, M. Z., Rhiner, M., & Rozek, A. (1991). Pain as a metaphor for illness. Part II: Family caregivers' management of pain. *Oncology Nursing Forum*, 18(8), 1315–1321. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/1762972>
- Ferrell, B. R., McGuire, D. B., & Donovan, M. I. (1993). Knowledge and beliefs regarding pain in a sample of nursing faculty. *Journal of Professional Nursing*, 9(2), 79-88. [http://dx.doi.org/10.1016/8755-7223\(93\)90023-6](http://dx.doi.org/10.1016/8755-7223(93)90023-6)
- Ferrell, B. R., Virani, R., & Grant, M. (1999). Analysis of symptom assessment and management content in nursing textbooks. *Journal of Palliative Medicine*, 2(2), 161-172. <http://dx.doi.org/10.1089/jpm.1999.2.161>

- Ferrell, BR. (2000). *Family Pain Questionnaire*. Retrieved from <http://prc.coh.org/pdf/FPQTOOL.pdf>
- Field, A. (2009). *Discovering Statistics using SPSS* (3rd ed.). London: Sage Publications.
- Field, L. (1996). Are nurses still underestimating patients' pain postoperatively?. *British Journal of Nursing*, 5(13), 778-784. <http://dx.doi.org/10.12968/bjon.1996.5.13.778>
- Fishbein, M., & Ajzen, I. (1975). *Belief, attitude, intention and behavior: An introduction to theory and research*.
- Fitzcharles, M. A., DaCosta, D., Ware, M. A., & Shir, Y. (2009). Patient barriers to pain management may contribute to poor pain control in rheumatoid arthritis. *The Journal of Pain*, 10(3), 300-305. <http://dx.doi.org/10.1016/j.jpain.2008.09.012>
- Fitzpatrick, J. M., While, A. E., & Roberts, J. D. (1996). Key influences on the professional socialisation and practice of students undertaking different preregistration nurse education programmes in the United Kingdom. *International Journal of Nursing Studies*, 33(5), 506-518. [http://dx.doi.org/10.1016/0020-7489\(96\)00003-x](http://dx.doi.org/10.1016/0020-7489(96)00003-x)
- Foley, K. M. (2002). *Changing concepts of tolerance to opioids: What the cancer patient has taught us*. New York: New York. Retrieved from <http://www.painresearch.utah.edu/cancerpain/ch20.html>
- Fornell, C., & Bookstein, F. L. (1982). Two structural equation models: LISREL and PLS applied to consumer exit-voice theory. *Journal of Marketing Research* (JMR), 19(4), 440-452. <http://dx.doi.org/10.2307/3151718>

- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of marketing research*, 18(1), 39-50. <http://dx.doi.org/10.2307/3151312>
- Fothergill-Bourbonnais, F., & Wilson-Barnett, J. (1992). A comparative study of intensive therapy unit and hospice nurses' knowledge on pain management. *Journal of Advanced Nursing*, 17(3), 362-372. <http://dx.doi.org/10.1111/j.1365-2648.1992.tb01915.x>
- Francis, G. M., & Munjas, B. (1975). *Promoting psychological comfort*. WC Brown.
- Francis, J. J., Eccles, M. P., Johnston, M., Walker, A., Grimshaw, J., Foy, R., ... & Bonetti, D. (2004). Constructing questionnaires based on the theory of planned behaviour. *A Manual for Health Services Researchers, 2010*, 2-12. Retrieved from <http://openaccess.city.ac.uk/1735/1/TPB%20Manual%20FINAL%20May2004.pdf>
- Francke, A. L., Lemmens, A. B., Huijer Abu-Saad, H., & Grypdonck, M. (1997). Nurses' perceptions of factors influencing the use of a pain program. *Journal of Pain and Symptom Management*, 14(5), 300-310. [http://dx.doi.org/10.1016/s0885-3924\(97\)00240-6](http://dx.doi.org/10.1016/s0885-3924(97)00240-6)
- Gay, L. R. (1987). *Educational research: Competences for analysis and application* (3rd ed.). New York : Macmillan.
- Gay, L. R., & Diehl, P. L. (1992). *Research methods for business and management*. New York: Macmillan.

- Geisser, S. (1974). A predictive approach to the random effect model. *Biometrika*, 61(1), 101-107. <http://dx.doi.org/10.1093/biomet/61.1.101>
- Gelinas, C. (2007). Management of pain in cardiac surgery ICU patients: Have we improved over time?. *Intensive and Critical Care Nursing*, 23(5), 298-303. <http://dx.doi.org/10.1016/j.iccn.2007.03.002>
- Gimble-Berglund, I., Ljusegren, G., & Enskär, K. (2008). Factors influencing pain management in children. *Paediatric Care*, 20(10), 21-24. <http://dx.doi.org/10.7748/paed2008.12.20.10.21.c6901>
- Glajchen, M. (2001). Chronic pain: Treatment barriers and strategies for clinical practice. *The Journal of the American Board of Family Practice*, 14(3), 211-218. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/11355054>
- Glajchen, M., & Bookbinder, M. (2001). Knowledge and perceived competence of home care nurses in pain management: A national survey. *Journal of Pain and Symptom Management*, 21(4), 307-316. [http://dx.doi.org/10.1016/s0885-3924\(01\)00247-0](http://dx.doi.org/10.1016/s0885-3924(01)00247-0)
- Gloth, F. M. (2001). Pain management in older adults: Prevention and treatment. *Journal of the American Geriatrics Society*, 49(2), 188-199. <http://dx.doi.org/10.1046/j.1532-5415.2001.49041.x>
- Godin, G., Bélanger-Gravel, A., Eccles, M., & Grimshaw, J. (2008). Healthcare professionals' intentions and behaviours: A systematic review of studies based on social cognitive theories. *Implement Sci*, 3(36), 1-12. <http://dx.doi.org/10.1186/1748-5908-3-36>

- Goodrich, C. (2006). Students' and faculty members' knowledge and attitudes regarding pain management: A descriptive survey. *The Journal of Nursing Education*, 45(3), 140-142. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/16562805>
- Government of Western Australia Department of Health. (2013). *Pain Management Teams*. Retrieved from <http://painhealth.csse.uwa.edu.au/resources/painHEALTH-using-a-pain-team.pdf>
- Graffam, S. (1981). Congruence of nurse-patient expectations regarding nursing intervention in pain. *Nursing Leadership*, 4(2), 12-15. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/6909611>
- Greenwood, J., Sullivan, J., Spence, K., & McDonald, M. (2000). Nursing scripts and the organizational influences on critical thinking: Report of a study of neonatal nurses' clinical reasoning. *Journal of Advanced Nursing*, 31(5), 1106-1114. <http://dx.doi.org/10.1046/j.1365-2648.2000.01378.x>
- Greer, S. M., Dalton, J. A., Carlson, J., & Youngblood, R. (2001). Surgical patients' fear of addiction to pain medication: The effect of an educational program for clinicians. *The Clinical Journal of Pain*, 17(2), 157-164. <http://dx.doi.org/10.1097/00002508-200106000-00008>
- Gregory, J. (2011). An exploration of factors impacting on changing pain assessment practice on a medical unit (Doctoral dissertation, Manchester Metropolitan University, North West England). Retrieved from https://www.rcn.org.uk/_data/assets/pdf_file/0006/496563/Gregory_J_complete_thesis_.pdf

- Griffiths, R. J., & Justins, D. M. (2006). Perioperative management of pain. *Surgery (Oxford)*, 24(10), 325-328. <http://dx.doi.org/10.1053/j.mpsur.2006.08.006>
- Grossman, S. A., Sheidler, V. R., Swedeen, K., Mucenski, J., & Piantadosi, S. (1991). Correlation of patient and caregiver ratings of cancer pain. *Journal of Pain and Symptom Management*, 6(2), 53-57. [http://dx.doi.org/10.1016/0885-3924\(91\)90518-9](http://dx.doi.org/10.1016/0885-3924(91)90518-9)
- Gunnarsdottir, S., Donovan, H. S., Serlin, R. C., Voge, C., & Ward, S. (2002). Patient-related barriers to pain management: The Barriers Questionnaire II (BQ-II). *Pain*, 99(3), 385-396. [http://dx.doi.org/10.1016/s0304-3959\(02\)00243-9](http://dx.doi.org/10.1016/s0304-3959(02)00243-9)
- Gunningberg, L., & Idvall, E. (2007). The quality of postoperative pain management from the perspectives of patients, nurses and patient records. *Journal of Nursing Management*, 15(7), 756-766. <http://dx.doi.org/10.1111/j.1365-2934.2006.00753.x>
- Gureje, O., Von Korff, M., Simon, G. E., & Gater, R. (1998). Persistent pain and well-being: A World Health Organization study in primary care. *JAMA: The Journal of the American Medical Association*, 280(2), 147-151. <http://dx.doi.org/10.1001/jama.280.2.147>
- Gustafsson, A., & Johnson, M. D. (2004). Determining attribute importance in a service satisfaction model. *Journal of Service Research*, 7(2), 124-141. <http://dx.doi.org/10.1177/1094670504268453>
- Guyton, A. C. (1991). *Textbook of medical physiology* (8th ed.). Philadelphia, PA: Saunders.

- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2006). *Multivariate data analysis* (6th ed.). Upper Saddle River, NJ: Pearson/Prentice Hall.
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2014). *A primer on partial least squares structural equation modeling (PLS-SEM)*. Thousand Oaks: Sage Publications.
- Hair, J. F., Jr., Black, W. C., Babin, B. J., & Andersen, R. E. (2010). *Multivariate data analysis* (7th ed.). Upper Saddle River, NJ: Pearson Prentice Hall.
- Hair, J. F., Money, A. H., Samouel, P., & Page, M. (2007). *Research method for business*. West Sussex, England: John Wiley & Sons Ltd.
- Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a Silver Bullet. *Journal of Marketing Theory and Practice*, 19(2), 139-152. <http://dx.doi.org/10.2753/mtp1069-6679190202>
- Hair, J. F., Ringle, C. M., & Sarstedt, M. (2013). Partial least squares structural equation modeling: Rigorous applications, better results and higher acceptance. *Long Range Planning*, 46(1–2), 1-12. <http://dx.doi.org/10.1016/j.lrp.2013.01.001>
- Hair, J. F., Sarstedt, M., Ringle, C. M., & Mena, J. A. (2012). An assessment of the use of partial least squares structural equation modeling in marketing research. *Journal of the Academy of Marketing Science*, 40(3), 414-433. <http://dx.doi.org/10.1007/s11747-011-0261-6>
- Haljamäe, H., & Warrén Stomberg, M. (2003). Postoperative pain management—clinical practice is still not optimal. *Current Anaesthesia & Critical Care*, 14(5-6), 207-210. <http://dx.doi.org/10.1016/j.cacc.2003.09.005>

- Hamilton, J., & Edgar, L. (1992). A survey examining nurses' knowledge of pain control. *Journal of Pain and Symptom Management*, 7(1), 18-26. [http://dx.doi.org/10.1016/0885-3924\(92\)90103-o](http://dx.doi.org/10.1016/0885-3924(92)90103-o)
- Hamilton, P. M. (1996). *Realities of contemporary nursing* (2nd ed.). St. Louis, MO: Mosby.
- Han, J. Y., Park, H. S., & Jin, M. J. (2016). Nurses' Knowledge and Performance of Pain Management at a General hospital. *Journal of Korean Academy of Fundamentals of Nursing*, 23(1), 6-11. <http://dx.doi.org/10.7739/jkafn.2016.23.1.6>
- Harrison, A. (1991). Assessing patients' pain: Identifying reasons for error. *Journal of Advanced Nursing*, 16(9), 1018-1025. <http://dx.doi.org/10.1111/j.1365-2648.1991.tb03361.x>
- Hawthorn, J., & Redmond, K. (1999). Pain: causes and management. *Journal of Psychiatric and Mental Health Nursing*, 6(5), 409-410. <http://dx.doi.org/10.1046/j.1365-2850.1999.00227-8.x>
- Henseler, J., Ringle, C. M., & Sinkovics, R. R. (2009). The use of partial least squares path modeling in international marketing. *Advances in International Marketing (AIM)*, 20, 277-320. [http://dx.doi.org/10.1108/s1474-7979\(2009\)0000020014](http://dx.doi.org/10.1108/s1474-7979(2009)0000020014)
- Herr, K., & Titler, M. (2009). Acute pain assessment and pharmacological management practices for the older adult with a hip fracture: Review of ED trends. *Journal of Emergency Nursing*, 35(4), 312-320. <http://dx.doi.org/10.1016/j.jen.2008.08.006>

- Hodges, S. C., Mijumbi, C., Okello, M., McCormick, B. A., Walker, I. A., & Wilson, I. H. (2007). Anaesthesia services in developing countries: Defining the problems. *Anaesthesia*, 62(1), 4-11. <http://dx.doi.org/10.1111/j.1365-2044.2006.04907.x>
- Holley, S., McMillan, S. C., Hagan, S. J., Palacios, P., & Rosenberg, D. (2005). Pain resource nurses: Believing the patients, believing in themselves. *Oncology Nursing Forum*, 32(4), 843–848. <http://dx.doi.org/10.1188/05.onf.843-848>
- Horbury C, Henderson A, Bromley B (2005) Influences of patient behaviour on clinical nurses pain assessment: Implications for continuing education. *The Journal of Continuing Education in Nursing*. 36 (1) 18-24. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/15715204>
- Hossain, M. S. (2010). Nurses' knowledge and attitudes, and pain management practice of post-operative children in Bangladesh (Master dissertation, Prince of Songkla University, Southern Thailand). Retrieved from <http://kb.psu.ac.th/psukb/bitstream/2010/7826/1/325999.pdf>
- Hsieh LF, Lin CC, Lai YH & Tsou TS. (1998).The relationship of the caregiver's concerns about using analgesics to the patient's cancer pain management. *The Journal of Nursing Research*, 6(4), 327–336. <http://140.112.114.62/handle/246246/199756#.VmtBp9J97IU>
- Huang, N., Cunningham, F., Laurito, C. E., & Chen, C. (2001). Can we do better with postoperative pain management?. *The American Journal of Surgery*, 182(5), 440-448. [http://dx.doi.org/10.1016/s0002-9610\(01\)00766-8](http://dx.doi.org/10.1016/s0002-9610(01)00766-8)

- Hulland, J. (1999). Use of partial least squares (PLS) in strategic management research: A review of four recent studies. *Strategic Management Journal*, 20(2), 195-204.
[http://dx.doi.org/10.1002/\(sici\)1097-0266\(199902\)20:2<195::aid-smj13>3.0.co;2-7](http://dx.doi.org/10.1002/(sici)1097-0266(199902)20:2<195::aid-smj13>3.0.co;2-7)
- Hutchison, R. W. (2007). Challenges in acute post-operative pain management. *American Journal of Health-System Pharmacy*, 64(6 Supplement 4), S2-S5.
<http://dx.doi.org/10.2146/ajhp060679>
- Huy Tuu, H., Ottar Olsen, S., & Thi Thuy Linh, P. (2011). The moderator effects of perceived risk, objective knowledge and certainty in the satisfaction-loyalty relationship. *Journal of Consumer Marketing*, 28(5), 363-375.
<http://dx.doi.org/10.1108/07363761111150017>
- Ignatavicius, D. D., & Workman, M. L. (2002). *Medical-surgical nursing: Critical thinking for collaborative care* (4th ed.). Philadelphia, PA: Saunders.
- Imarengiaye, C. O., & Ande, A. B. A. (2006). Demand and utilisation of labour analgesia service by Nigerian women. *Journal of Obstetrics & Gynecology*, 26(2), 130-132. <http://dx.doi.org/10.1080/01443610500443402>
- International Association for the Study of Pain. (2010a). *IASP Declaration of Montréal*. Retrieved from <http://www.iasp-pain.org/DeclarationofMontreal?navItemNumber=582>
- International Association for the Study of Pain. (2010b). *Jordan Initiative for Pain Management*. Retrieved from <http://www.iasp-pain.org/files/Content/NavigationMenu/Advocacy/InternationalPainSummit/JordanReport.pdf>

International Association for the Study of Pain. (2012). *IASP pain Taxonomy*. Retrieved from <http://www.iasp-pain.org/Education/Content.aspx?ItemNumber=1698#Pain>

Jackson, E. B. (2011). Evaluating knowledge and attitudes of graduate nursing students regarding pain (Master dissertation, University of South Florida, Tampa, Florida, USA). Retrieved from <http://scholarcommons.usf.edu/cgi/viewcontent.cgi?article=4360&context=etd>

Jacob, E. (2007). Pain assessment and management in children. In M. J. Hockenberry, & D. Wilson (Eds.), *Wong's nursing care of infants and children* (pp. 205- 256). Canada: Mosby Elsevier.

Jacob, E., & Puntillo, K. A. (1999). Pain in hospitalized children: Pediatric nurses' beliefs and practices. *Journal of Pediatric Nursing*, 14(6), 379-391. [http://dx.doi.org/10.1016/s0882-5963\(99\)80067-0](http://dx.doi.org/10.1016/s0882-5963(99)80067-0)

Jacobsen, R., Liubarskienė, Z., Moldrup, C., Christrup, L., Sjogren, P., & Samsanaviciene, J. (2009). Barriers to cancer pain management: A review of empirical research. *Medicina (Kaunas)*, 45(6), 427-433. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/19605961>

Jacox, A, Carr, D., Payne, R., Berde, C., Brietbart, C, Cain, J., et al. (1994). *Management of cancer pain. Clinical Practice Guideline No. 9* [AHCPR Publication No. 940592]. Rockville, MD: Agency for Health Care Policy and Research. Retrieved from <https://archive.org/details/managementofcanc00usde>

- Jalalian, M., Latiff, L., Hassan, S. T. S., Hanachi, P., & Othman, M. (2010). Development of a questionnaire for assessing factors predicting blood donation among university students: A pilot study. *Southeast Asian Journal of Tropical Medicine and Public Health*, 41(3), 660-666. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/20578556>
- JMoH. (2005). *National health strategy 2006-2010*. Amman: Jordan. Retrieved from <http://www.mindbank.info/item/1358>
- JMoH. (2012). *Periodic-Newsletters*. Retrieved from <http://www.moh.gov.jo/EN/Pages/Periodic-Newsletters.aspx>
- JMoH. (2014). *Periodic-Newsletters*. Retrieved from <http://www.moh.gov.jo/EN/Pages/Periodic-Newsletters.aspx>
- Joint Commission on Accreditation of Health Care Organizations (JCAHO). (1999). *Standards for pain assessment and treatment. Comprehensive accreditations manual for ambulatory care, behavioral health care, health care networks, home care, hospitals, and long-term care*. Oakbrook, IL. JCAHO.
- Jones, W. L., Rimer, B. K., Levy, M. H., & Kinman, J. L. (1984). Cancer patients' knowledge, beliefs, and behavior regarding pain control regimens: Implications for education programs. *Patient Education and Counseling*, 5(4), 159-164. [http://dx.doi.org/10.1016/0738-3991\(84\)90175-7](http://dx.doi.org/10.1016/0738-3991(84)90175-7)

- Jurgens, D. W. (1996). Nurses' intentions to administer morphine for postoperative pain: An application of Ajzen's theory of planned behaviour (Doctoral dissertation, University of Saskatchewan, Saskatoon, Saskatchewan, Canada). Retrieved from <http://www.collectionscanada.gc.ca/obj/s4/f2/dsk3/ftp04/nq24026.pdf>
- Kaki, A. M., Daghistani, M. F., & Msabeh, A. A. (2009). Nurses' knowledge of pharmacological measures on acute pain management in Western Saudi Arabia. *Saudi Medical Journal*, 30(2), 279-283. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/19198720>
- Kam, Y. C. (2007). Medical nurses' knowledge, attitudes and barriers in pain management (Master dissertation, The University of Hong Kong, Hong Kong). Retrieved from <http://hdl.handle.net/10722/131384>
- Keefe, G., & Wharrad, H. J. (2012). Using e-learning to enhance nursing students' pain management education. *Nurse education today*, 32(8), e66-e72. <http://dx.doi.org/10.1016/j.nedt.2012.03.018>
- Kehlet, H., Jensen, T. S., & Woolf, C. J. (2006). Persistent postsurgical pain: Risk factors and prevention. *The Lancet*, 367(9522), 1618-1625. [http://dx.doi.org/10.1016/s0140-6736\(06\)68700-x](http://dx.doi.org/10.1016/s0140-6736(06)68700-x)
- Kitson, A. (1994). Post-operative pain management: A literature review. *Journal of Clinical Nursing*, 3(1), 7-18. <http://dx.doi.org/10.1111/j.1365-2702.1994.tb00353.x>

- Kizza, I. B. (2012). Nurses' knowledge and practices related to pain assessment in critically ill patients at Mulago Hospital, Uganda (Doctoral dissertation, Muhimbili University of Health and Allied Sciences, Dar es Salaam, Tanzania). Retrieved from http://ihi.eprints.org/1598/1/Irene_Betty_Kizza.pdf
- Kline, R. B. (1998). *Principles and Practice of Structural Equation Modeling*. New York: The Guilford Press.
- Klopper, H., Andersson, H., Minkkinen, M., Ohlsson, C., & Sjöström, B. (2006). Strategies in assessing post operative pain—A South African study. *Intensive and Critical Care Nursing*, 22(1), 12-21. <http://dx.doi.org/10.1016/j.iccn.2005.05.001>
- Kneafsey, R. (2000). The effect of occupational socialization on nurses' patient handling practices. *Journal of Clinical Nursing*, 9(4), 585–593. <http://dx.doi.org/10.1046/j.1365-2702.2000.00391.x>
- Knowles, R. (1996). Standardization of pain management in the postanesthesia care unit. *Journal of PeriAnesthesia Nursing*, 11(6), 390-398. [http://dx.doi.org/10.1016/s1089-9472\(96\)90050-7](http://dx.doi.org/10.1016/s1089-9472(96)90050-7)
- Kozier, B., Erb, G., Berman, A. & Snyder, S. (2004). *Fundamentals of nursing: Concepts, process, and practice* (7th. ed.). New Jersey: Pearson Education, Inc.
- Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 30(3), 607-610. Retrieved from file:///C:/Users/bashar/Downloads/KrejcieandMorgan_article.pdf

- Kwekkeboom, K. L., & Herr, K. A. (2001). Assessment of pain in the critically ill. *Critical Care Nursing Clinics of North America*, 13(2), 181-194. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/11866401>
- Lai, Y. H., Chen, M. L., Tsai, L. Y., Lo, L. H., Wei, L. L., Hong, M. Y., ... & Guo, S. L. (2003). Are nurses prepared to manage cancer pain? A national survey of nurses' knowledge about pain control in Taiwan. *Journal of Pain and Symptom Management*, 26(5), 1016-1025. [http://dx.doi.org/10.1016/s0885-3924\(03\)00330-0](http://dx.doi.org/10.1016/s0885-3924(03)00330-0)
- Lambert, D. M., & Harrington, T. C. (1990). Measuring nonresponse bias in customer service mail surveys. *Journal of Business Logistics*, 11(2), 5-25. Retrieved from http://hbanaszak.mjr.uw.edu.pl/TempTxt/lambert_harrington_1990_measuring_non_response_bias_in_customer_service_mail_surveys.pdf
- Layman Young, J., Horton, F. M., & Davidhizar, R. (2006). Nursing attitudes and beliefs in pain assessment and management. *Journal of Advanced Nursing*, 53(4), 412-421. <http://dx.doi.org/10.1111/j.1365-2648.2006.03735.x>
- Lee, F. H., & Wu, W. Y. (2011). Moderating effects of technology acceptance perspectives on e-service quality formation: Evidence from airline websites in Taiwan. *Expert Systems with Applications*, 38(6), 7766-7773. <http://dx.doi.org/10.1016/j.eswa.2010.12.131>
- Lellan, K. M. (1997). A chart audit reviewing the prescription and administration trends of analgesia and the documentation of pain, after surgery. *Journal of Advanced Nursing*, 26(2), 345-350. <http://dx.doi.org/10.1046/j.1365-2648.1997.1997026345.x>

Lellan, K.M. (2004). Postoperative pain: Strategy for improving patient experiences. *Journal of Advanced Nursing*, 46(2), 179-185.

<http://dx.doi.org/10.1111/j.1365-2648.2003.02977.x>

Levett-Jones, T. L. (2005). Continuing education for nurses: A necessity or a nicety?. *The Journal of Continuing Education in Nursing*, 36(5), 229. Retrieved from

<http://search.proquest.com/openview/a8111abc90f3fb9e89b74a82556c51a2/1?pq-origsite=gscholar>

Levin, D. N., Cleeland, C. S., & Dar, R. (1985). Public attitudes toward cancer pain. *Cancer*, 56(9), 2337-2339.

[http://dx.doi.org/10.1002/1097-0142\(19851101\)56:9<2337::aid-cnrcr2820560935>3.0.co;2-w](http://dx.doi.org/10.1002/1097-0142(19851101)56:9<2337::aid-cnrcr2820560935>3.0.co;2-w)

Lewin, K. (1951). *Field theory in social science: Selected theoretical papers*. New York: Harper.

Lewis, S. L., Heitkemper, M. M., Dirksen, S. R., O'Brien, P. G., & Bucher, L. (2007). *Medical surgical nursing* (7th ed.). St Louis, MO: Mosby.

Lewthwaite, B. J., Jabusch, K. M., Wheeler, B. J., Schnell-Hoehn, K. N., Mills, J., Estrella-Holder, E., & Fedorowicz, A. (2011). Nurses' knowledge and attitudes regarding pain management in hospitalized adults. *Journal of Continuing Education in Nursing*, 42(6), 251-257. <http://dx.doi.org/10.3928/00220124-20110103-03>

- Li, L., & Liu, X. Q. (2003). A survey of nurses' current knowledge regarding pain. *Journal of Chinese Nursing Research*, 17, 633-635. Retrieved from http://en.cnki.com.cn/Article_en/CJFDTotol-SXHZ200311008.htm
- Linton, A. D., & Maebius, N. K. (2003). *Introduction to medical-surgical nursing* (3rd ed.). Philadelphia, PA: Saunders.
- Linton, S. J. (1997). Overlooked and underrated?: The role of acute pain intensity in the development of chronic back pain problems. *Pain Forum*, 6(2), 145-147. [http://dx.doi.org/10.1016/s1082-3174\(97\)70049-7](http://dx.doi.org/10.1016/s1082-3174(97)70049-7)
- Lui, L. Y., So, W. K., & Fong, D. Y. (2008). Knowledge and attitudes regarding pain management among nurses in Hong Kong medical units. *Journal of Clinical Nursing*, 17(15), 2014-2021. <http://dx.doi.org/10.1111/j.1365-2702.2007.02183.x>
- Macfarlane, G. J., Crombie, I. K., McBeth, J., & Silman, A. J. (2001). Widespread body pain and mortality: prospective population based study Commentary: An interesting finding, but what does it mean?. *Bmj*, 323(7314), 662. <http://dx.doi.org/10.1136/bmj.323.7314.662>
- Mackintosh, C. (2007). Assessment and management of patients with post-operative pain. *Nursing Standard*, 22(5), 49-55. <http://dx.doi.org/10.7748/ns2007.10.22.5.49.c4640>
- Manworren, R. C. B. (2000). Pediatric nurses knowledge and attitudes survey regarding pain. *Pediatric Nursing*, 26(6), 610-614. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/12026363>

- Mathew, P. J., Mathew, J. L., & Singhi, S. (2011). Knowledge, attitude and practice of pediatric critical care nurses towards pain: Survey in a developing country setting. *Journal of Postgraduate Medicine*, 57(3), 196-200.
<http://dx.doi.org/10.4103/0022-3859.85203>
- Matthews, E., & Malcolm, C. (2007). Nurses' knowledge and attitudes in pain management practice. *British Journal of Nursing*, 16(3), 174-179.
<http://dx.doi.org/10.12968/bjon.2007.16.3.22972>
- McCaffery, M. (1968). *N-110B Clinical nursing: Nursing practice theories related to cognition, bodily pain, and man-environment interactions*. Regents of the University of California.
- McCaffery, M. (1979). *Nursing management of the patient with pain*. Philadelphia: Lippincott.
- McCaffery, M. (1983). *Nursing management of the patient in pain* (2nd ed.). Philadelphia: JB Lippincott.
- McCaffery, M., & Ferrell, B. R. (1992). Nurses' knowledge of doses and psychological dependence. *Journal for Nurses in Professional Development*, 8(2), 77-84.
Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/1432189>
- McCaffery, M., & Ferrell, B. R. (1995). Nurse's knowledge about cancer pain: A survey of five countries. *Journal of Pain and Symptom Management*, 10(5), 356-369.
[http://dx.doi.org/10.1016/0885-3924\(95\)00059-8](http://dx.doi.org/10.1016/0885-3924(95)00059-8)
- McCaffery, M., & Pasero, C. (1999). *Pain: Clinical manual* (2nd ed.). St. Louis: Mosby.

McCaffery, M., & Robinson, E. (2002). Your patient is in pain: Here's how your respond. *Nursing*, 32(10), 36-45. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/12395040>

McCaffery, M., Ferrell, B., O'Neil-Page, E., & Lester, M. (1990). Nurses' knowledge of opioid analgesic drugs and psychological dependence. *Cancer Nursing*, 13(1), 21-27. <http://dx.doi.org/10.1097/00002820-199002000-00004>

McCaffrey, M., & Ferrell, B. R. (1997). Nurses' knowledge of pain assessment and management: How much progress have we made?. *Journal of Pain and Symptom Management*, 14(3), 175-188. [http://dx.doi.org/10.1016/s0885-3924\(97\)00170-x](http://dx.doi.org/10.1016/s0885-3924(97)00170-x)

McDonald, D. D., McNulty, J., Erickson, K., & Weiskopf, C. (2000). Communicating pain and pain management needs after surgery. *Applied Nursing Research*, 13(2), 70-75. [http://dx.doi.org/10.1016/s0897-1897\(00\)80003-8](http://dx.doi.org/10.1016/s0897-1897(00)80003-8)

McDonald, M. (2002). *Systematic assessment of learning outcomes: Developing multiple-choice exams*. Jones & Bartlett Learning.

McInerney, M., Goodenough, B., Jastrzab, G., & Kerr, S. (2003). Paediatric nurses' knowledge and attitudes concerning suboptimal pain management for children. *Neonatal, Paediatric & Child Health Nursing*, 6(2), 15-23. Retrieved from https://www.researchgate.net/publication/236985394_Paediatric_nurses%27_knowledge_and_attitudes_concerning_suboptimal_pain_management_for_children

- McLean, S. A., Maio, R. F., & Domeier, R. M. (2002). The epidemiology of pain in the prehospital setting. *Prehospital emergency care*, 6(4), 402-405. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/12385606>
- McMillan, B., & Conner, M. (2003). Using the theory of planned behaviour to understand alcohol and tobacco use in students. *Psychology, Health & Medicine*, 8(3), 317-328. <http://dx.doi.org/10.1080/1354850031000135759>
- McMillan, S. C., Tittle, M., Hagan, S., & Laughlin, J. (2000). Management of pain and pain-related symptoms in hospitalized veterans with cancer. *Cancer Nursing*, 23(5), 327-336. <http://dx.doi.org/10.1097/00002820-200010000-00001>
- McMillan, S. C., Tittle, M., Hagan, S., Laughlin, J., & Tabler, R. E. (2000). Knowledge and attitudes of nurses in veterans hospitals about pain management in patients with cancer. *Oncology Nursing Forum*, 27(9), 1415-1423. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/11058973>
- McQuay, H. J., Moore, R. A., McQuay, H. J., & Moore, A. (1998). *An evidence-based resource for pain relief*. Oxford: Oxford University Press.
- Melzack, R. & Hall, P. (1996). *The challenge of pain* (2nd ed.). London: Penguin Books.
- Melzack, R. (1990). The tragedy of needless pain. *Sci Am*, 262(2), 27-33. <http://dx.doi.org/10.1038/scientificamerican0290-27>
- Merboth, M. K., & Barnason, S. (2000). Managing pain: The fifth vital sign. *The Nursing Clinics of North America*, 35(2), 375-383. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/10873249>

- Middleton, C. (2003). Understanding the physiological effects of unrelieved pain. *Nursing Times*, 99(37), 28-31. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/14533321>
- Miller, K. L., & Smith, L. E. (1983). Handling non-response issues. *Journal of Extension*, 21(5), 45-50. Retrieved from <http://www.joe.org/joe/1983september/83-5-a7.pdf>
- Mirsanjari, M., Muda, W. A. M. W., Ahmad, A., Othman, M. S., Mosavat, M., & Mirsanjari, M. M. (2012). Relationship between nutritional knowledge and healthy attitude and practice during pregnancy. *Borneo Sci*, 31, 104-112.
- Montes-Sandoval, L. (1999). An analysis of the concept of pain. *Journal of Advanced Nursing*, 29(4), 935-941. <http://dx.doi.org/10.1046/j.1365-2648.1999.00971.x>
- Moulin, D. E., Clark, A. J., Speechley, M., & Morley-Forster, P. K. (2002). Chronic pain in Canada--prevalence, treatment, impact and the role of opioid analgesia. *Pain Research & Management*, 7(4), 179-184. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/12518174>
- Mrozek, J. E., & Werner, J. S. (2001). Nurses' attitudes toward pain, pain assessment, and pain management practices in long-term care facilities. *Pain Management Nursing*, 2(4), 154-162. <http://dx.doi.org/10.1053/jpmn.2001.26530>
- Musgrave, C. F. (1990). Acute postoperative pain: The cause and the care. *Journal of Post Anesthesia Nursing*, 5(5), 329-337. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/2213625>

- Nash, R., Edwards, H., & Nebauer, M. (1993). Effect of attitudes, subjective norms and perceived control on nurses' intention to assess patients' pain. *Journal of Advanced Nursing*, 18(6), 941-947. <http://dx.doi.org/10.1046/j.1365-2648.1993.18060941.x>
- Nash, R., Najman, J., Yates, P., Edwards, H., Fentiman, B., Dewar, A., ... & Skerman, H. (1996). *Educating nurses and patients for effective usage of analgesic medications*. Brisbane: Queensland University of Technology.
- Neisser, U. (1976). *Cognition and reality: Principles and implications of cognitive psychology*. San Francisco: Freeman.
- Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric theory* (3rd ed.). New York: McGraw- Hill.
- O'Brien, S., Dalton, J. A., Konsler, G., & Carlson, J. (1996). The knowledge and attitudes of experience oncology nurses regarding the management of cancer-related pain. *Oncology Nursing Forum*, 23(3), 515-521. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/8801512>
- Olinsky, A., Chen, S., & Harlow, L. (2003). The comparative efficacy of imputation methods for missing data in structural equation modeling. *European Journal of Operational Research*, 151(1), 53-79. [http://dx.doi.org/10.1016/s0377-2217\(02\)00578-7](http://dx.doi.org/10.1016/s0377-2217(02)00578-7)
- Oncology Nursing Society. (2012). *Oncology Nursing Society position on cancer pain management*. Retrieved from <http://www2.ons.org/Publications/Positions/media/ons/docs/positions/summary-cancerpainmanagement.pdf>

- Oppenheim, A. N. (1966). *Questionnaire design and attitude measurement*. New York: Basic Books, Inc.
- Osborne, J. W., & Waters, E. (2002). Four assumptions of multiple regression that researchers should always test. *Practical Assessment, Research and Evaluation*, 8(2), 1-5. Retrieved from <http://www-psychology.concordia.ca/fac/kline/601/osborne.pdf>
- Page, G. G., & Halvorson, M. (1991). Pediatric nurses: The assessment and control of pain in preverbal infants. *Journal of Pediatric Nursing*, 6(2), 99-106. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/2019972>
- Pallant, J. (2001). *SPSS Survival Manual: A Step by Step Guide to Data Analysis Using SPSS for Windows (10th ed.)*: Open University Press.
- Pallant, J. (2005). *SPSS survival manual: a step by step guide to data analysis using SPSS for windows (2nd ed.)*. Maidenhead: Open University Press.
- Pallant, J. (2010). *SPSS survival manual: A step by step guide to data analysis using SPSS (4th ed.)*. New York, NY: Open University Press.
- Pasero, C., & McCaffery, M. (2011). *Pain assessment and pharmacologic management*. Elsevier Health Sciences.
- Patiraki, E. I., Papathanassoglou, E. D., Tafas, C., Akarepi, V., Katsaragakis, S. G., Kampitsi, A., & Lemonidou, C. (2006). A randomized controlled trial of an educational intervention on Hellenic nursing staff's knowledge and attitudes on cancer pain management. *European Journal of Oncology Nursing*, 10(5), 337-352. <http://dx.doi.org/10.1016/j.ejon.2005.07.006>

- Patterson, D. R., & Jensen, M. P. (2003). Hypnosis and clinical pain. *Psychological Bulletin*, 129(4), 495-521. <http://dx.doi.org/10.1037/0033-2909.129.4.495>
- Pederson, C., & Lee Harbaugh, B. (1995). Nurses' use of nonpharmacologic techniques with hospitalized children. *Issues in Comprehensive Pediatric Nursing*, 18(2), 91-109. <http://dx.doi.org/10.3109/01460869509080962>
- Pellino, T. A. (1997). Relationships between patient attitudes, subjective norms, perceived control, and analgesic use following elective orthopedic surgery. *Research in nursing & health*, 20(2), 97-105. [http://dx.doi.org/10.1002/\(sici\)1098-240x\(199704\)20:2<97::aid-nur2>3.0.co;2-o](http://dx.doi.org/10.1002/(sici)1098-240x(199704)20:2<97::aid-nur2>3.0.co;2-o)
- Peng, D. X., & Lai, F. (2012). Using partial least squares in operations management research: A practical guideline and summary of past research. *Journal of Operations Management*, 30(6), 467-480. <http://dx.doi.org/10.1016/j.jom.2012.06.002>
- Phillips, C. J. & Schopflocher, D. (2008). *Health policy perspectives on chronic pain: The economics of chronic pain*. UK: Wiley Press.
- Plaisance, L., & Logan, C. (2006). Nursing students' knowledge and attitudes regarding pain. *Pain Management Nursing*, 7(4), 167-175. <http://dx.doi.org/10.1016/j.pmn.2006.09.003>
- Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: a critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879-903. <http://dx.doi.org/10.1037/0021-9010.88.5.879>

- Pölkki, T., Vehviläinen-Julkunen, K., & Pietilä, A. M. (2001). Non pharmacological methods in relieving children's postoperative pain: A survey on hospital nurses in Finland. *Journal of Advanced Nursing*, 34(4), 483-492. <http://dx.doi.org/10.1046/j.1365-2648.2001.01777.x>
- Polomano, R. C., Dunwoody, C. J., Krenzischek, D. A., & Rathmell, J. P. (2008). Perspective on pain management in the 21st century. *Pain Management Nursing*, 9(1), 3-10. <http://dx.doi.org/10.1016/j.pmn.2007.11.002>
- Portenoy, R. K., & Kanner, R. (Eds.). (1996). *Pain management: theory and practice*. FA Davis Company.
- Rahimi-Madiseh, M., Tavakol, M., & Dennick, R. (2010). A quantitative study of Iranian nursing students' knowledge and attitudes towards pain: Implication for education. *International Journal of Nursing Practice*, 16(5), 478-483. <http://dx.doi.org/10.1111/j.1440-172x.2010.01872.x>
- Ramayah, T., Lee, J. W. C. & In, J. B. C. (2011). Network collaboration and performance in the tourism sector. *Service Business*, 5(4), 411-428. <http://dx.doi.org/10.1007/s11628-011-0120-z>
- Ravaud, P., Keita, H., Porcher, R., Durand-Stocco, C., Desmonts, J. M., & Mantz, J. (2004). Randomized clinical trial to assess the effect of an educational programme designed to improve nurses' assessment and recording of postoperative pain. *British Journal of Surgery*, 91(6), 692-698. <http://dx.doi.org/10.1002/bjs.4506>

Registered Nurses Association of Ontario (RNAO). (2002). *Assessment and management of pain*. Toronto, ON: Registered Nurses Association of Ontario. Retrieved from http://www.bluewaterhealth.ca/documents/187/Assessment_Management_of_Pain.pdf

Registered Nurses Association of Ontario (RNAO). (2013). *Assessment and management of pain*. Toronto, ON: Registered Nurses Association of Ontario. Retrieved from <http://rnao.ca/sites/rnao-ca/files/AssessAndManagementOfPain2014.pdf>

Richards, J., & Hubbert, A. O. (2007). Experiences of expert nurses in caring for patients with postoperative pain. *Pain Management Nursing*, 8(1), 17-24. <http://dx.doi.org/10.1016/j.pmn.2006.12.003>

Riddell, A., & Fitch, M. I. (1997). Patients' knowledge of and attitudes toward the management of cancer pain. *Oncology Nursing Forum*, 24(10), 1175– 1784. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/9399275>

Rieman, M. T., & Gordon, M. (2007). Pain management competency evidenced by a survey of pediatric nurses' knowledge and attitudes. *Pediatric Nursing*, 33(4), 307-312. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/17907731>

Ringle, C. M., Sarstedt, M., & Straub, D. W. (2012). Editor's comments: a critical look at the use of PLS-SEM in MIS quarterly. *MIS Quarterly*, 36(1), iii-xiv. Retrieved from <http://misq.org/skin/frontend/default/misq/pdf/V36I1/EdCommentsV36N1.pdf>

- Ringle, C. M., Wende, S., & Will, A. (2005). *SmartPLS 2.0*. Retrieved from www.smartpls.de.
- Rittenmeyer, H., Dolezal, D., & Vogel, E. (1997). Pain management: A quality improvement project. *Journal of PeriAnesthesia Nursing, 12*(5), 329-335. [http://dx.doi.org/10.1016/s1089-9472\(97\)80051-2](http://dx.doi.org/10.1016/s1089-9472(97)80051-2)
- Rollman, G. B., Abdel-Shaheed, J., Gillespie, J. M., & Jones, K. S. (2004). Does past pain influence current pain: Biological and psychosocial models of sex differences. *European Journal of Pain, 8*(5), 427-433. <http://dx.doi.org/10.1016/j.ejpain.2004.03.002>
- Romsing, J. (1996). Assessment of nurses' judgement for analgesic requirements of postoperative children. *Journal of Clinical Pharmacy and Therapeutics, 21*(3), 159-163. <http://dx.doi.org/10.1111/j.1365-2710.1996.tb00016.x>
- Rony, R. Y. Z., Fortier, M. A., Chorney, J. M., Perret, D., & Kain, Z. N. (2010). Parental postoperative pain management: attitudes, assessment, and management. *Pediatrics, 125*(6), e1372-e1378. <http://dx.doi.org/10.1542/peds.2009-2632>
- Roscoe, J. T. (1975). *Fundamental research statistics for the behavioral sciences* (2nd ed.). New York: Holt, Rinehart and Winston.
- Rosenfeld, B. A., Faraday, N., Campbell, D., Dise, K., Bell, W., & Goldschmidt, P. (1994). Hemostatic effects of stress hormone infusion. *Anesthesiology, 81*(5), 1116-1126. <http://dx.doi.org/10.1097/00000542-199411000-00005>

Royal College of Surgeons and The College of Anaesthetists (1990) *Commission on the provision of services report of the working party on pain after surgery*. London, Royal college of Surgeons and College of Anaesthetists. Retrieved from <http://www.rcoa.ac.uk/system/files/FPM-Pain-After-Surgery.pdf>

Roykulcharoen, V., & Good, M. (2004). Systematic relaxation to relieve postoperative pain. *Journal of Advanced Nursing*, 48(2), 140-148. <http://dx.doi.org/10.1111/j.1365-2648.2004.03181.x>

Rummans, T. A., Frost, M., Suman, V. J., Taylor, M., Novotny, P., Gendron, T., ... & Evans, R. W. (1998). Quality of life and pain in patients with recurrent breast and gynecologic cancer. *Psychosomatics*, 39(5), 437-445. [http://dx.doi.org/10.1016/s0033-3182\(98\)71303-9](http://dx.doi.org/10.1016/s0033-3182(98)71303-9)

Salantera, S., & Lauri, S. (2000). Nursing students' knowledge of and views about children in pain. *Nurse Education Today*, 20(7), 537-547. <http://dx.doi.org/10.1054/nedt.2000.0472>

Salantera, S., Lauri, S., Salmi, T. T., & Helenius, H. (1999). Nurses' knowledge about pharmacological and nonpharmacological pain management in children. *Journal of Pain and Symptom Management*, 18(4), 289-299. [http://dx.doi.org/10.1016/s0885-3924\(99\)00065-2](http://dx.doi.org/10.1016/s0885-3924(99)00065-2)

Salkind, N. J. (1997). *Exploring research* (3rd ed.). Upper Saddle River, NJ: Prentice Hall.

- Sanders, M. R., & Woolley, M. L. (2005). The relationship between maternal self-efficacy and parenting practices: implications for parent training. *Child: care, health and development*, 31(1), 65-73. <http://dx.doi.org/10.1111/j.1365-2214.2005.00487.x>
- Sandie, C. L., & Heindel, L. J. (1999). The knowledge and attitudes of nonanesthesia nurses regarding postoperative epidural analgesia. *American Journal of Nurse Anesthetists*, 67, 455-460. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/10876436>
- Sattler, H., Völckner, F., Riediger, C., & Ringle, C. M. (2010). The impact of brand extension success drivers on brand extension price premiums. *International Journal of Research in Marketing*, 27(4), 319-328. <http://dx.doi.org/10.1016/j.ijresmar.2010.08.005>
- Sauaia, A., Min, S. J., Leber, C., Erbacher, K., Abrams, F., & Fink, R. (2005). Postoperative pain management in elderly patients: Correlation between adherence to treatment guidelines and patient satisfaction. *Journal of the American Geriatrics Society*, 53(2), 274-282. <http://dx.doi.org/10.1111/j.1532-5415.2005.53114.x>
- Schafheutle, E. I., Cantrill, J. A., & Noyce, P. R. (2001). Why is pain management suboptimal on surgical wards?. *Journal of Advanced Nursing*, 33(6), 728-737. <http://dx.doi.org/10.1046/j.1365-2648.2001.01714.x>
- Schmidt, K., Eland, J., & Weiler, K. (1994). Pediatric cancer pain management: A survey of nurses' knowledge. *Journal of Pediatric Oncology Nursing*, 11(1), 4-12. <http://dx.doi.org/10.1177/104345429401100103>

- Schmieding, N. J., & Waldman, R. C. (1997). Nasogastric tube feeding and medication administration: A survey of nursing practices. *Gastroenterology Nursing*, 20(4), 118-124. <http://dx.doi.org/10.1097/00001610-199707000-00003>
- Schopflocher, D., R. Jovey, et al. (2010). The burden of pain in Canada, results of a Nanos survey. *Pain Resident Manage*: In Press.
- Seers, K., & Carroll, D. (1998). Relaxation techniques for acute pain management: A systematic review. *Journal of Advanced Nursing*, 27(3), 466-475. <http://dx.doi.org/10.1046/j.1365-2648.1998.00538.x>
- Sekaran, U. & Bougie, R. (2010). *Research methods for business: A skill building approach* (5th ed.). UK: John Willey
- Sekaran, U. (2003). *Research methods for business: A skill building approach* (4th ed.). New York: John Wiley & Sons.
- Sheeran, P. (2002). Intention—behavior relations: A conceptual and empirical review. *European Review of Social Psychology*, 12(1), 1-36. <http://dx.doi.org/10.1080/14792772143000003>
- Sherwood, G., Adams-McNeill, J., Starck, P. L., Nieto, B., & Thompson, C. J. (2000). Qualitative assessment of hospitalized patients' satisfaction with pain management. *Research in Nursing & Health*, 23(6), 486-495. [http://dx.doi.org/10.1002/1098-240x\(200012\)23:6<486::aid-nur7>3.3.co;2-x](http://dx.doi.org/10.1002/1098-240x(200012)23:6<486::aid-nur7>3.3.co;2-x)
- Shimizu, I. (1998). Multistage Sampling. *Encyclopedia of Biostatistics*. <http://dx.doi.org/10.1002/0470011815.b2a16041>

- Shoup, J. A. (2007). *Culture and customs of Jordan*. Greenwood Publishing Group.
- Shuriquie, M., While, A., & Fitzpatrick, J. (2008). Nursing work in Jordan: an example of nursing work in the Middle East. *Journal of clinical nursing*, 17(8), 999-1010.
<http://dx.doi.org/10.1111/j.1365-2702.2007.01973.x>
- Simpson, K., Kautzman, L., & Dodd, S. (2002). The effects of a pain management education program on the knowledge level and attitudes of clinical staff. *Pain Management Nursing*, 3(3), 87-93. <http://dx.doi.org/10.1053/jpmn.2002.126071>
- Singh, A., Purohit, B. M., Bhambal, A., Saxena, S., Singh, A., & Gupta, A. (2011). Knowledge, attitudes, and practice regarding infection control measures among dental students in Central India. *Journal of dental education*, 75(3), 421-427.
Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/21368266>
- Skevington, S. M. (1998). Investigating the relationship between pain and discomfort and quality of life, using the WHOQOL. *Pain*, 76(3), 395-406.
[http://dx.doi.org/10.1016/s0304-3959\(98\)00072-4](http://dx.doi.org/10.1016/s0304-3959(98)00072-4)
- Sloman, R., Ahern, M., Wright, A., & Brown, L. (2001). Nurses' knowledge of pain in the elderly. *Journal of Pain and Symptom Management*, 21(4), 317-322.
[http://dx.doi.org/10.1016/s0885-3924\(01\)00248-2](http://dx.doi.org/10.1016/s0885-3924(01)00248-2)
- Sloman, R., Rosen, G., Rom, M., & Shir, Y. (2005). Nurses' assessment of pain in surgical patients. *Journal of Advanced Nursing*, 52(2), 125-132.
<http://dx.doi.org/10.1111/j.1365-2648.2005.03573.x>

- Smart, S. (2005). Post-operative pain management knowledge and attitude of pediatric nurses: A New Zealand Regional view (master's dissertation, Victoria University of Wellington, Wellington, New Zealand). Retrieved from <http://researcharchive.vuw.ac.nz/xmlui/bitstream/handle/10063/38/thesis.pdf?sequence=2>
- Snijders, T. A. B. (2005). Power and sample size in multilevel linear models. In B. S. Everitt & D. C. Howell (Eds.), *Encyclopedia of statistics in behavioral science* (Vol. 3, pp. 1570-1573). Chichester: Wiley.
- Stephens, J., Laskin, B., Pashos, C., Pena, B., & Wong, J. (2003). The burden of acute postoperative pain and the potential role of the COX-2-specific inhibitors. *Rheumatology*, *42*(90003), 40-52. <http://dx.doi.org/10.1093/rheumatology/keg497>
- Stone, M. (1974). Cross-validatory choice and assessment of statistical predictions. *Journal of the Royal Statistical Society. Series B (Methodological)*, *36*(2), 111-147. Retrieved from <http://www.jstor.org/stable/2984809>
- Strong, J., Unruh, A., Wright, A., & Baxter, G. (2002). *Pain: A textbook for therapists*. Elsevier Churchill Livingstone.
- Suen, K. P. L. (1999). Knowledge, attitude and practice of nursing home staff towards physical restraints in Hong Kong nursing homes. *Asian journal of nursing studies*, *5*(2), 73-86. Retrieved from <http://repository.lib.polyu.edu.hk/jspui/bitstream/10397/2498/1/AJNS11.pdf>

- Sullivan, L. M. (1994). Factors influencing pain management: A nursing perspective. *Journal of Post Anesthesia Nursing*, 9(2), 83-90. Retrieved from <http://europepmc.org/abstract/med/8158575>
- Summer, G. J., & Puntillo, K. A. (2001). Management of surgical and procedural pain in a critical care setting. *Critical Care Nursing Clinics of North America*, 13(2), 233-242. <http://www.ncbi.nlm.nih.gov/pubmed/11866405>
- Suri, V., Rao, N. C., & Aggarwal, N. (2014). A study of obstetricians' knowledge, attitudes and practices in oral health and pregnancy. *Education for Health*, 27(1), 51-55. <http://dx.doi.org/10.4103/1357-6283.134313>
- Sykes, N., Fallon, M., & Patt, R. (2003). *Clinical pain management: Cancer pain*. London: Arnold.
- Tabachnick, B. G., & Fidell, L. S. (2001). *Using multivariate statistics* (4th ed.). Allyn and Bacon
- Tabachnick, B. G. & Fidel, L. S. (2007). *Using multivariate statistics* (5th ed.). Boston: Pearson Education Inc.
- Tapp, J., & Kropp, D. (2005). Evaluating pain management delivered by direct care nurses. *Journal of Nursing Care Quality*, 20(2), 167-173. <http://dx.doi.org/10.1097/00001786-200504000-00013>
- Taylor, C. (1997). Problem solving in clinical nursing practice. *Journal of Advanced Nursing*, 26(2), 329-336. <http://dx.doi.org/10.1046/j.1365-2648.1997.1997026329.x>

Teske, K., L Daut, R., & S Cleeland, C. (1983). Relationships between nurses' observations and patients' self-reports of pain. *Pain*, 16(3), 289-296. [http://dx.doi.org/10.1016/0304-3959\(83\)90117-3](http://dx.doi.org/10.1016/0304-3959(83)90117-3)

Tesler, M. D., Wilkie, D. J., Holzemer, W. L., & Savedra, M. C. (1994). Postoperative analgesics for children and adolescents: Prescription and administration. *Journal of Pain and Symptom Management*, 9(2), 85-95. [http://dx.doi.org/10.1016/0885-3924\(94\)90161-9](http://dx.doi.org/10.1016/0885-3924(94)90161-9)

The British Pain Society. (2010). *Understanding and managing pain: Information for patients*. London: The British Pain Society. Retrieved from http://www.britishpainsociety.org/book_understanding_pain.pdf

The South African Society of Anaesthesiologists. (2009). South African Acute Pain Guidelines. *Southern African Journal of Anaesthesia and Analgesia*, 15(6):1-120. Retrieved from http://www.sasaweb.com/content/images/SASA_Pain_Guidelines.pdf

Thomas VN. (1997). *Pain: Its nature and management*. London: Balliere and Tindell.

Titler, M. G., Herr, K., Schilling, M. L., Marsh, J. L., Xie, X. J., Ardery, G., ... & Everett, L. Q. (2003). Acute pain treatment for older adults hospitalized with hip fracture: Current nursing practices and perceived barriers. *Applied Nursing Research*, 16(4), 211-227. [http://dx.doi.org/10.1016/s0897-1897\(03\)00051-x](http://dx.doi.org/10.1016/s0897-1897(03)00051-x)

- Tsai, F. C., Tsai, Y. F., Chien, C. C., & Lin, C. C. (2007). Emergency nurses' knowledge of perceived barriers in pain management in Taiwan. *Journal of Clinical Nursing, 16*(11), 2088-2095. <http://dx.doi.org/10.1111/j.1365-2702.2006.01646.x>
- Tse, M. M. Y., & Ho, S. S. (2014). Enhancing knowledge and attitudes in pain management: A pain management education program for nursing home staff. *Pain Management Nursing, 15*(1), 2-11. <http://dx.doi.org/10.1016/j.pmn.2012.03.009>
- Tse, M. M., & Chan, B. S. (2004). Knowledge and attitudes in pain management: Hong Kong nurses' perspective. *Journal of Pain and Palliative Care Pharmacotherapy, 18*(1), 47-58. http://dx.doi.org/10.1080/j354v18n01_04
- Tu, M. S., & Chiou, C. P. (2007). Perceptual consistency of pain and quality of life between hospice cancer patients and family caregivers: A pilot study. *International Journal of Clinical Practice, 61*(10), 1686-1691. <http://dx.doi.org/10.1111/j.1742-1241.2007.01347.x>
- Turina, M., Miller, F. N., Tucker, C. F., & Polk, H. C. (2006). Short-term hyperglycemia in surgical patients and a study of related cellular mechanisms. *Annals of Surgery, 243*(6), 845- 853. <http://dx.doi.org/10.1097/01.sla.0000220041.68156.67>
- Twycross, A. (2000). Education about pain: A neglected area?. *Nurse Education Today, 20*(3), 244-253. <http://dx.doi.org/10.1054/nedt.1999.0412>
- Twycross, A. (2007a). Children's nurses' post-operative pain management practices: An observational study. *International Journal of Nursing Studies, 44*(6), 869-881. <http://dx.doi.org/10.1016/j.ijnurstu.2006.03.010>

- Twycross, A. (2007b). What is the impact of theoretical knowledge on children's nurses' post-operative pain management practices? An exploratory study. *Nurse Education Today*, 27(7), 697-707. <http://dx.doi.org/10.1016/j.nedt.2006.10.004>
- Twycross, A. (2008). Does the perceived importance of a pain management task affect the quality of children's nurses' post-operative pain management practices?. *Journal of Clinical Nursing*, 17(23), 3205-3216. <http://dx.doi.org/10.1111/j.1365-2702.2008.02631.x>
- Twycross, R. G., & Lack, S. A. (1983). *Symptom control in far advanced cancer: Pain relief*. London: Pitman.
- Tzeitlin, T., & Shvartzman, P. (2000). Knowledge, attitudes and skills of family physicians in Israel with regard to chronic pain management in cancer. *Harefuah*, 139(7-8), 252-5. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/11062963>
- Tzeng, J. I., Chou, L. F., & Lin, C. C. (2006). Concerns about reporting pain and using analgesics among Taiwanese postoperative patients. *The Journal of Pain*, 7(11), 860-866. <http://dx.doi.org/10.1016/j.jpain.2006.04.007>
- Ung, A., Salamonson, Y., Hu, W., & Gallego, G. (2015). Assessing knowledge, perceptions and attitudes to pain management among medical and nursing students: a review of the literature. *British Journal of Pain*, 2049463715583142. <http://dx.doi.org/10.1177/2049463715583142>

- Urden, L. D., Stacy, K. M., & Lough, M. E. (2008). *Priorities in critical care nursing* (5th ed.). St. Louis, MO: Mosby Inc.
- Van den Beuken-van Everdingen, M. H. J., De Rijke, J. M., Kessels, A. G., Schouten, H. C., Van Kleef, M., & Patijn, J. (2007). Prevalence of pain in patients with cancer: A systematic review of the past 40 years. *Annals of Oncology*, *18*(9), 1437-1449. <http://dx.doi.org/10.1093/annonc/mdm056>
- Van der Does A.J. (1989). Patients' and nurses' ratings of pain and anxiety during burn wound care. *Pain*, *39*(1), 95-101. [http://dx.doi.org/10.1016/0304-3959\(89\)90179-6](http://dx.doi.org/10.1016/0304-3959(89)90179-6)
- Vanegas, G., Ripamonti, C., Sbanotto, A., & DeConno, F. (1998). Side effects of morphine administration in cancer patients. *Cancer Nursing*, *21*(4), 289-297. <http://dx.doi.org/10.1097/00002820-199808000-00011>
- Verardi, V., & Croux, C. (2008). Robust regression in Stata. Retrieved from https://lirias.kuleuven.be/bitstream/123456789/202142/1/KBI_0823.pdf
- Vincent, C. V. H. (2005). Nurses' knowledge, attitudes, and practices: regarding children's pain. *MCN: The American Journal of Maternal/Child Nursing*, *30*(3), 177-183. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/15867678>
- Vincent, C. V. H., & Denyes, M. J. (2004). Relieving children's pain: Nurses' abilities and analgesic administration practices. *Journal of Pediatric Nursing*, *19*(1), 40-50. <http://dx.doi.org/10.1016/j.pedn.2003.09.006>

- Vink, J. M., & Boomsma, D. I. (2008). A comparison of early and late respondents in a twin-family survey study. *Twin Research and Human Genetics*, 11(2), 165- 173. <http://dx.doi.org/10.1375/twin.11.2.165>
- Von Roenn, J. H. (2001). Are we the barrier?. *Journal of Clinical Oncology*, 19(23), 4273-4274. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/11731508>
- Von Roenn, J. H., Cleeland, C. S., Gonin, R., Hatfield, A. K., & Pandya, K. J. (1993). Physician attitudes and practice in cancer pain management: A survey from the Eastern Cooperative Oncology Group. *Annals of Internal Medicine*, 119(2), 121-126. <http://dx.doi.org/10.7326/0003-4819-119-2-199307150-00005>
- Vortherms, R., Ryan, P., & Ward, S. (1992). Knowledge of, attitudes toward, and barriers to pharmacologic management of cancer pain in a statewide random sample of nurses. *Research in Nursing & Health*, 15(6), 459-466. <http://dx.doi.org/10.1002/nur.4770150608>
- Voshall, B., Dunn, K. S., & Shelestak, D. (2013). Knowledge and attitudes of pain management among nursing faculty. *Pain Management Nursing*, 14(4), e226-e235. <http://dx.doi.org/10.1016/j.pmn.2012.02.001>
- Walkenstein, M. D. (1982). Comparison of burned patients' perception of pain with nurses' perception of patients' pain. *Journal of Burn Care & Research*, 3(4), 233-236. <http://dx.doi.org/10.1097/00004630-198207000-00010>
- Wallace, K. G., Reed, B. A., Pasero, C., & Olsson, G. L. (1995). Staff nurses' perceptions of barriers to effective pain management. *Journal of Pain and Symptom Management*, 10(3), 204-213. [http://dx.doi.org/10.1016/0885-3924\(94\)00125-5](http://dx.doi.org/10.1016/0885-3924(94)00125-5)

- Ward, S. E., Goldberg, N., Miller-McCauley, V., Mueller, C., Nolan, A., Pawlik-Plank, D., ... & Weissman, D. E. (1993). Patient-related barriers to management of cancer pain. *Pain*, 52(3), 319-324. [http://dx.doi.org/10.1016/0304-3959\(93\)90165-1](http://dx.doi.org/10.1016/0304-3959(93)90165-1)
- Watson, C. B. (2002). Respiratory complications associated with anesthesia. *Anesthesiology Clinics of North America*, 20(3), 513-537. [http://dx.doi.org/10.1016/s0889-8537\(02\)00015-9](http://dx.doi.org/10.1016/s0889-8537(02)00015-9)
- Watt-Watson, J., Chung, F., Chan, V. W., & McGillion, M. (2004). Pain management following discharge after ambulatory same-day surgery. *Journal of Nursing Management*, 12(3), 153-161. <http://dx.doi.org/10.1111/j.1365-2834.2004.00470.x>
- Watt-Watson, J., Stevens, B., Garfinkel, P., Streiner, D., & Gallop, R. (2001). Relationship between nurses' pain knowledge and pain management outcomes for their postoperative cardiac patients. *Journal of Advanced Nursing*, 36(4), 535-545. <http://dx.doi.org/10.1046/j.1365-2648.2001.02006.x>
- Weber, A., Dwyer, T., & Mummery, K. (2012). Morphine administration by paramedics: An application of the theory of planned behaviour. *Injury*, 43(9), 1393-1396. <http://dx.doi.org/10.1016/j.injury.2010.12.006>
- Wells, N. (2000). Pain intensity and pain interference in hospitalized patients with cancer. *Oncology Nursing Forum*, 27(6), 985-991. <http://www.ncbi.nlm.nih.gov/pubmed/10920837>

- Wells, N., Johnson, R. L., & Wujcik, D. (1998). Development of a short version of the Barriers Questionnaire. *Journal of Pain and Symptom Management, 15*(5), 294-297. [http://dx.doi.org/10.1016/s0885-3924\(98\)00019-0](http://dx.doi.org/10.1016/s0885-3924(98)00019-0)
- Werner, S. A. (2011). Pain assessment and pain alleviation practices of ambulance officers in Auckland (Master dissertation, AUT University, New Zealand). Retrieved from <http://aut.researchgateway.ac.nz/bitstream/handle/10292/1401/WernerS.pdf?sequence=3>
- Werts, C. E., Linn, R. L., & Jöreskog, K. G. (1974). Intraclass reliability estimates: Testing structural assumptions. *Educational and Psychological measurement, 34*(1), 25-33. <http://dx.doi.org/10.1177/001316447403400104>
- Williams, L.D. (2005). Pain. In Baird, M. S., Keen, J. H. & Swearinger, P. L., *Nursing interventions and collaborative management* (5th ed.). St. Louis: Elsevier Mosby.
- Wilson, B. (2007). Nurses' knowledge of pain. *Journal of Clinical Nursing, 16*(6), 1012-1020. <http://dx.doi.org/10.1111/j.1365-2702.2007.01692.x>
- Wilson, B., Callaghan, W., Ringle, C., & Henseler, J. (2007). *Exploring causal path directionality for a marketing model using Cohen's path method*. Paper presented at the PLS'07 international symposium on PLS and related methods– Causalities explored by indirect observation, Oslo.
- Winefield, H. R., Katsikitis, M., Hart, L. M., & Rounsefell, B. F. (1990). Postoperative pain experiences: Relevant patient and staff attitudes. *Journal of Psychosomatic Research, 34*(5), 543-552. [http://dx.doi.org/10.1016/0022-3999\(90\)90029-4](http://dx.doi.org/10.1016/0022-3999(90)90029-4)

- Wold, H. (1982). Soft modeling: The basic design and some extensions. In Jo'reskog, K.G., & Wold, H. E. (Eds), *Systems under indirect observation: Causality, structure, prediction*. Amsterdam: North-Holland.
- Wolfert, M. Z., Gilson, A. M., Dahl, J. L., & Cleary, J. F. (2010). Opioid analgesics for pain control: Wisconsin physicians' knowledge, beliefs, attitudes, and prescribing practices. *Pain Medicine, 11*(3), 425-434. <http://dx.doi.org/10.1111/j.1526-4637.2009.00761.x>
- Wong, D., Hockenberry-Eaton, M., Wilson, D., Winklestein, M., & Schwatz, P. (2001). *Wong's essentials of pediatric nursing* (6th ed.). St Louis: Mosby.
- Wood, S. (2004). Factors influencing the selection of appropriate pain assessment tools. *Nursing Times, 100*(35), 42-47. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/15471273>
- World Health Organisation. (2007). *WHO normative guidelines on pain management*. Retrieved from http://www.who.int/medicines/areas/quality_safety/delphi_study_pain_guidelines.pdf.
- Wulff, T. (2012). Knowledge and clinical practice of nurses for adult post-operative orthopaedic pain management (Master dissertation, Stellenbosch University, the town of Stellenbosch, South Africa). Retrieved from <http://scholar.sun.ac.za/handle/10019.1/20219>

- Yates, P. M., Edwards, H. E., Nash, R. E., Walsh, A. M., Fentiman, B. J., Skerman, H. M., & Najman, J. M. (2002). Barriers to effective cancer pain management: A survey of hospitalized cancer patients in Australia. *Journal of Pain and Symptom Management*, 23(5), 393-405. [http://dx.doi.org/10.1016/s0885-3924\(02\)00387-1](http://dx.doi.org/10.1016/s0885-3924(02)00387-1)
- Yean, T. F., & Sukery, A. F. B. M. (2012). A study of attitude, subjective norms, perceived behavioral control and the intention to return to work as SOCSO's insured person. In *Proceedings of USM-AUT International Conference 2012 Sustainable Economic Development: Policies and Strategies* (Vol. 167, p. 423). Retrieved from https://www.researchgate.net/publication/236736940_Sustainable_Economic_Development_Policies_and_Strategies
- Yildirim, Y. K., Cicek, F., & Uyar, M. (2008). Knowledge and attitudes of Turkish oncology nurses about cancer pain management. *Pain Management Nursing*, 9(1), 17-25. <http://dx.doi.org/10.1016/j.pmn.2007.09.002>
- Young, D. M. (1999). Acute pain management protocol. *Journal of Gerontological Nursing*, 25(6), 10-21. <http://dx.doi.org/10.3928/0098-9134-19990601-06>
- Yu, H. D., & Petrini, M. A. (2007). A survey of Chinese nurses' current knowledge of pain in older people. *Journal of Clinical Nursing*, 16(5), 963-970. <http://dx.doi.org/10.1111/j.1365-2702.2006.01779.x>
- Zalon, M. L. (1993). Nurses' assessment of postoperative patients' pain. *Pain*, 54(3), 329-334. [http://dx.doi.org/10.1016/0304-3959\(93\)90033-1](http://dx.doi.org/10.1016/0304-3959(93)90033-1)

- Zalon, M. L. (1995). Pain management instruction in nursing curricula. *The Journal of Nursing Education*, 34(6), 262-267. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/7472637>
- Zhang, C. H., Hsu, L., Zou, B. R., Li, J. F., Wang, H. Y., & Huang, J. (2008). Effects of a pain education program on nurses' pain knowledge, attitudes and pain assessment practices in China. *Journal of Pain and Symptom Management*, 36(6), 616-627. <http://dx.doi.org/10.1016/j.jpainsymman.2007.12.020>
- Zhu, D. Q., Norman, I. J., & While, A. E. (2013). Nurses' self-efficacy and practices relating to weight management of adult patients: a path analysis. *International Journal of Behavioral Nutrition and Physical Activity*, 10(1), 131. <http://dx.doi.org/10.1186/1479-5868-10-131>
- Zhukovsky, D. S., Gorowski, E., Hausdorff, J., Napolitano, B., & Lesser, M. (1995). Unmet analgesic needs in cancer patients. *Journal of Pain and Symptom Management*, 10(2), 113-119. [http://dx.doi.org/10.1016/0885-3924\(94\)00072-s](http://dx.doi.org/10.1016/0885-3924(94)00072-s)
- Zikmund, W., Babin, B., Carr, J., & Griffin, M. (2009). *Business research methods* (8th ed.). Cincinnati, OH: South-Western.