



# Middle East Journal of Nursing



June 2013

VOLUME 7 ISSUE 3

ISSN 1834-8742

**Chief Editor:**

A. Abyad MD,  
MPH, AGSF, AFCHS

**Editorial Office:**

Abyad Medical Center &  
Middle East Longevity Institute  
Azmi Street, Abdo Center  
PO BOX 618  
Tripoli, Lebanon  
P + (961) 6 443684  
F + (961) 6 443685  
E editor@me-jn.com

**Publisher:**

Ms Lesley Pocock

**Publishing Office:**

medi+WORLD International  
11 Colston Avenue,  
Sherbrooke Victoria 3789, Australia  
P + (613) 9005 9847  
F + (613) 9012 5857  
E lesleypocock@mediworld.com.au

**Editorial Enquiries:**

aabyad@cyberia.net.lb

**Advertising Enquiries:**

lesleypocock@mediworld.com.au

*While all efforts have been made to ensure the accuracy of the information in this journal, opinions expressed are those of the authors and do not necessarily reflect the views of The Publishers, Editor or the Editorial Board. The publishers, Editor and Editorial Board cannot be held responsible for errors or any consequences arising from the use of information contained in this journal; or the views and opinions expressed. Publication of any advertisements does not constitute any endorsement by the Publishers and Editors of the product advertised.*

*The contents of this journal are copyright. Apart from any fair dealing for purposes of private study, research, criticism or review, as permitted under the Australian Copyright Act, no part of this program may be reproduced without the permission of the publisher.*

## Editorial

- 2 Chief Editor - A. Abyad

## Original Contribution / Clinical Investigation

- 3 Chemotherapy Induced Nausea and Vomiting on Quality of Life Among cancer Patients: A review  
Ehssan AL-Abdallah, Nijmeh Al-Atiyyat
- 7 Communication in Verbal Hand-Over Reports: Nurses' Experiences from In-Patients Hospital Units in Saudi Arabia - Qualitative Study  
Haniha Alyamany
- 15 Changes in cognitive and functional status of the hospitalized elderly and their related factors: a cross-sectional study  
Shahin Salarvand, Yadollah Pournia

## Review Article

- 35 Policy Analysis of Violent Behaviour  
Mohammed Ahmad Almaani

## Evidence Based Nursing

- 40 Pain Experience among Patients Receiving Cancer Treatment: A Case Study  
Bilal. S. H. Badr Naga, Nijmeh. M. H. Al-Atiyyat

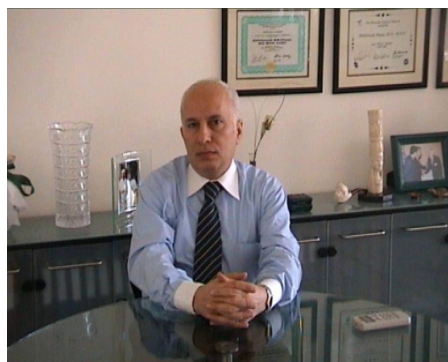
## Education and Training

- 48 What is The Purpose of Community Meeting in an Inpatients Psychiatric Unit?  
Ala'a Alnasser

## Community Nursing

- 51 Policy Analysis Paper: Protect Public Health from Smoking Dangers Policy  
Jawad Obaidi

## FROM THE EDITOR



**Abdulrazak Abyad**  
MD, MPH, AGSF, AFCHS  
(Chief Editor)

### Editorial office:

Abyad Medical Center &  
Middle East Longevity Institute  
Azmi Street, Abdo Center  
PO BOX 618  
Tripoli, Lebanon  
P + (961) 6 443684  
F + (961) 6 443685  
E [aabyad@cyberia.net.lb](mailto:aabyad@cyberia.net.lb)  
W [www.amc-lb.com](http://www.amc-lb.com)

### Publishing Office:

medi+WORLD International  
11 Colston Avenue  
Sherbrooke 3789  
Australia  
E [admin@mediworld.com.au](mailto:admin@mediworld.com.au)  
W [www.me-jn.com](http://www.me-jn.com)

In this issue a number of papers from the region deal with various issue of interest to the nursing field and the community.

### A Case Study looked at Pain Experience among Patients Receiving Cancer Treatment Pain

The author stressed that pain is the most feared symptom found in patients who have malignant tumor, and represents the most feared consequences for patients and their families.

Inadequate management of pain is the result of various issues that include: under treatment by clinicians with insufficient knowledge of pain assessment and therapy; inappropriate concerns about opioid side effects and addiction; a tendency to give lower priority to symptom control than to disease management; patients under-determined purposes of interventions and optimal use of limited in-patient resources. The authors concluded that the violence on mental health staff is prevalent and increasing in the

the psychiatric setting, there are alternative ways to reduce incidence of unsafe violent behavior.

A large group meeting of patients and health team widespread in the majority of Mental hospital is often called "community meetings". The community meeting occurs in inpatients setting as a part of the therapeutic action delivered to clients. The authors ask the question of What is The Purpose of Community Meeting in an Inpatients Psychiatric Unit? Community meeting is a part of milieu program, its a regular meeting in an inpatient unit for all staff and patients on the unit, the duration range from 45 to 60 minutes, it can be held once daily to once weekly. The member of the meeting includes nurses, social workers, occupational therapists and psychiatrics.

The meeting derived from work done in England during World War II. At that time, large number of patients needed care for the treatment of mental illnesses, the treatment are primary guided by psychoanalytic theory and clinical experience, the use of community meeting is classified as "milieu therapy".

A systematic search of the literature published between 2006 and 2012 was undertaken to identify research available on chemotherapy induced nausea and vomiting and quality of life.

This study is aimed at examining the impact of chemotherapy-induced nausea and vomiting on QoL of patients among cancer patient. The mixed methods review was conducted using critique quantitative studies prospective. The authors concluded that even if the number of the published studies specifically aimed to evaluate the impact of the chemotherapy-induced nausea and vomiting (CINV) on Quality of life (QL) can be considered high, those showing results that are reliable and helpful to orient the clinical decision are few. Also considering the improvement in antiemetic therapy obtained in the last few years, and the more frequent implementation of reliable antiemetic guidelines, as well as the recent increasing diffusion of lower emetogenic chemotherapies, more research should be performed to obtain results on the impact of CINV on QL useful to orient the choice of antiemetic therapy.

Nurses are communicating between each other and with other health care workers, in order to provide good nursing care for the patients. The authors attempt to describe nurses' experiences of communication during verbal hand-over reporting, on in-patient units. Qualitative, semi-structured open ended interviews carried out with ten participants. Content analysis method is used to analyse the data in this study. The study showed that the hand-over verbal communication experienced between the nurses had many advantages which can be connected with nurses' satisfaction in providing high quality care and that this reflects positively in patient's satisfaction and safety. The points considered as challenges are related and connected to; miscommunication, misunderstanding, incomplete patient data and language issues. The advantages and challenges shown in the result section of this study are important factors to be taken into consideration, for further research in the area of communication in hand-over reporting. Further research in the field can lead to improved safety and quality of care for patients in hospitals in Saudi Arabia.

A policy analysis paper discussed the effect of smoking on public health. Jordan has a series of smoking control policies that have been established since 1971. However, apparently there are many factors that prevent the actual implementation of smoking control policies in Jordan. The authors reviewed the smoking control policies applied, to demonstrate the efforts that have been spent at the national and at international level to enforce these policies, and discussed the major factors that prevents the actual implementation of the smoking control policies, to assess and analyze the protect public health from smoking dangerous policy in Jordan regarding to (administrative ease, cost and benefit, effectiveness, equity, legality and the political acceptability). The author propose solutions that may enforce smoking control policies to protect Jordanian health from the risk of tobacco smoking.

# CHEMOTHERAPY INDUCED NAUSEA AND VOMITING ON QUALITY OF LIFE AMONG CANCER PATIENTS: A REVIEW

Ehssan AL-Abdallah  
Nijmeh Al-Atiyyat

Faculty of Nursing  
The Hashemite University

## Correspondence

Ehssan AL-Abdallah, MSN, RN  
Faculty of Nursing  
The Hashemite University  
Amman, Jordan  
**Email:** ehssan986@yahoo.com

## Introduction and Background

Chemotherapy is considered the first drug of choice of physicians to treat cancer patients; between 500,000 and 1 million Americans receive chemotherapy each year. Nausea and vomiting affects 70 to 80 percent of people who receive chemotherapy and can result in significant morbidity ( Rudolph. Navari, 2007 ). First of all the classification of nausea and vomiting in patients receiving chemotherapy could be acute: i.e. occurring within 24 hours of chemotherapy; delayed, occurring between 24 hours and 5 days after treatment; breakthrough, occurring despite prophylactic treatment; anticipatory, occurring before chemotherapy treatment; and refractory, occurring during subsequent cycles when antiemetics have failed in earlier cycles; this effect varies from one patient to another according to chemotherapy type, doses, route and patient experience.

Nausea and vomiting, is considered a large and serious problem affecting patients who receive chemotherapy and affects their quality of life. This needs more focus on the problem and the method to prevent or decrease chemotherapy induced nausea and vomiting (CINV) to improve patient quality of life (QOL).

The main purpose of this review is to analyze the impact of chemotherapy induced nausea and vomiting on quality of life among patients with leukemia.

## Methodology

To critically examine the effect of chemotherapy induced nausea and vomiting on quality of life among leukemia patients, a comprehensive literature review was conducted using the electronic databases of nursing, Ovid, Science Direct, the Cumulative Index to Nursing and Allied Health Literature "CINAHL" and Pubmed for articles published

## Abstract

**Background:** Quality of life (QoL) has become a major outcome in the treatment of patients with cancer. This study is aimed at examining the impact of chemotherapy-induced nausea and vomiting on QoL of patients among cancer patients.

**Methodology:** A systematic search of the literature published between 2006 and 2012 was undertaken to identify research available on chemotherapy induced nausea and vomiting and quality of life. The mixed methods review was conducted using critique quantitative studies prospective.

**Result:** It is commonly claimed that the nausea and vomiting accompanying cytotoxic chemotherapy have a negative impact on quality of life. While this may seem self-evident, there is little empirical data demonstrating that the failure to control chemotherapy nausea and vomiting affects aspects of quality of life other than directly related physical symptoms.

**Conclusion:** Even if the number of the published studies specifically aiming to evaluate the impact of chemotherapy-induced nausea and vomiting (CINV) on Quality of life (QL) can be considered high, those showing results that are reliable and helpful to orient the clinical decision are few. Also considering the improvement in antiemetic therapy obtained in the last few years, and the more frequent implementation of reliable antiemetic guidelines, as well as the recent increasing diffusion of lower emetogenic chemotherapies, more research should be performed to obtain results on the impact of CINV on QL useful to orient the choice of antiemetic therapy.

**Key words:** chemotherapy, quality of life, leukemia, nausea and vomiting



between 2006 and 2012. The intention was to review all full publications that have been appearing in English language.

Biomedical journals were used to search the electronic databases using keywords: nausea and vomiting, quality of life, leukemia, chemotherapy. Key words were used in multiple combinations to conduct an extensive search of these databases. Computerized listings from nursing Ovid, Science Direct, CINAHL and Pubmed contained, a total of 42 articles that were identified and after exclusion of duplicates, the review utilized 8 articles which met the inclusion criteria.

Article inclusion criteria for the integrative research review were the following:

1. It is a research-based study.
2. It included a population of patient cancer more than 18 years.
3. It investigated chemotherapy induced nausea and vomiting.
4. It is written in the English language.
5. Is published in the last 6 years.

Based on the inclusion criteria, a total of 8 articles published from 2006 to 2012 were selected and formed the basis for this review. The earliest study included was published in 2006, with most studies published from 2011 through to 2012. Most articles were published in nursing journals.

Countries within which the studies for this review were conducted, include the United States, Spain, Indonesia, Germany, and England.

### Methodological Characteristics:

The eight studies composing this integrative research review were quantitative studies. All of them were prospective. A wide variety of instruments were used to measure concepts of chemotherapy induced nausea and vomiting. The sample size in the 8 research studies

ranged from 43 to 298, either male or female, in leukemia cancer; three studies were conducted in the United State and two studies conducted in Spain, and one each in Germany, Indonesia, and England.

This literature review was guided by Symptom Management Theory which was developed by Pat Larson in 1994.

### Analysis of the literature findings

This section presents the review of related articles of studies related to chemotherapy induced nausea and vomiting and quality of life among cancer patients.

(Perwitasari et al) in his study about the quality of life with a sample of 179 cancer patients, using the EORTC quality of life questionnaire (QLQ-C30) and The Short Form (36) Health Survey (SF-36) tools for assessment of nausea and vomiting, and administered immediately before and on day 5 after chemotherapy administration. Patients record nausea and vomiting over 5 days after chemotherapy and the result findings show most (74.9%) of the patients experienced delayed emesis during the 5 days after chemotherapy despite the prophylactic use of antiemetics which caused significant negative impact on patients' QoL.

Another study by Bloechl-Daum et al about the effect of delayed nausea and vomiting on quality of life was conducted in 14 medical practices on cancer patients in the United States with a sample of 298 patients. Patients completed the Functional Living Index-Emesis (FLIE) questionnaire at baseline and on day six. Results found nausea had a stronger negative impact on patients' daily lives than vomiting.

Jordan et al in his study to assess whether prechemotherapy quality of life factors and found certain coping strategies are associated with post chemotherapy nausea and vomiting (PCNV). A total of 43 chemotherapy patients were enrolled in this study.

(QoL) parameters were measured by a modified EORTC Quality of Life Questionnaire (QLQ-30), more than half of patients receiving antiemetics still experienced (PCNV) in this study and this affects QOL for these patients.

Ortega et al, using Data for 160 patients from nine university hospitals, found most of the participants (70 %) were women with a mean age of 50 years. Despite the use of antiemetic prophylaxis, patients experienced significant nausea and vomiting during chemotherapy (31 %).

Bloechl-Daum et al in his finding of the results that patients were assessable, delayed vomiting was reported by 32.5% and delayed nausea by 54.3%.

Carole Farrell et al, used a prospective observational study over two cycles of chemotherapy. Patients completed the Multinational Association of Supportive Care in Cancer Antiemesis Tool, a measure of nutritional status, the Functional Assessment of Cancer Therapy-General (FACT-G) quality of life scale and the Hospital Anxiety and Depression Scale at the end of each chemotherapy cycle. The sample consisted of 104 patients, primarily female, receiving anthracycline-based chemotherapy. High levels of nausea were observed (55.2-72.9 %), and severe nausea was reported by 20.5-29.2 % of the participants. Chemotherapy-induced nausea has an impact on nutritional status and physical functioning and can impair anxiety and quality of life.

Jiménez et al evaluated the incidence and severity of chemotherapy-induced nausea and vomiting (CINV) in oncohematology in routine clinical practice, and its impact on quality of life, with the study including: acute myeloid leukemia and stem cell transplant recipients. One hundred consecutive transplant and 77 acute myeloid leukemia patients were studied. Among patients with emesis, the mean percentage of days with emesis and the mean total

number of emetic episodes were 61% and 9.4 (transplant recipients), and 53.6% and 6.2 (leukemia patients), respectively. CINV control was lower in the delayed than in the acute phase.

Cohen et al study participants recorded occurrence of CINV by completing a daily diary each day for the first 8 days after treatment during each cycle and the Functional Living Index-Emesis (FLIE) before chemotherapy, at the end of day 1 and day 6 after chemotherapy. Mixed model regression analysis was used to explore the association between occurrence of and its impact on patient QOL and he found occurrence of CINV significantly interfered with patient QOL as assessed by the FLIE.

Enzo Ballatori et al, assessed adult cancer patients who were receiving cisplatin-containing regimens and reported incidence and intensity of CINV for eight consecutive days in a diary and completed a Functional Living Index for Emesis (FLIE) questionnaire.

## Conclusion and Recommendation

Although the fact that the effect of CINV on QOL has a short-term effect, its evaluation is useful for clinical decisions concerning the choice of appropriate antiemetic prophylaxis. Only the result of an antiemetic randomized clinical trial can help to reach this goal. Because of the subjectivity of patient's answers, only a double-blind study can be assured to provide reliable results.

Finally, the correct choice of the antiemetic treatments can lead to useful results to improve quality of life. In fact, if new antiemetic prophylaxis were compared to a treatment different from the standard therapy, no information about the differences between the mean scores of the new treatment and standard therapy would be available. The above mentioned difference can lead only to less

efficacy of the used comparison with regards to the standard antiemetic therapy. For the same reasons any comparison involving optimal antiemetic regimens could be regarded as useless for a specific clinical decision. Unfortunately not one of the of eight comparative studies identified in our review was randomized and double-blind. Therefore, only the results of two studies can be regarded as helpful for orienting the choice of an antiemetic prophylaxis.

Summarizing the results obtained from the review show that the antiemetic prophylaxis, allowing better control for nausea and vomiting during the first day of chemotherapy, also lead to an improvement in the patients QOL. Among the 8 comparative studies, heterogeneity of instruments aimed at evaluating QOL was detected: in 3 studies FLIE tools, in 3 the EORTC QLQ-C30, and in 2 (FACT-G) tools. The reasons for the choice of the instrument to use to assess the influence of emesis on QOL are clearly described by Jordan et al.

In conclusion, even if the number of the published studies specifically aimed to evaluate the impact of the chemotherapy-induced emesis on QOL are considered high, those showing results that are reliable and helpful to orient clinical practice are few. Also considering the improvement in antiemetic guidelines, therapy obtained in the last years, and the more frequent implementation of reliable antiemetic guidelines, as well as the recent increasing diffusion of lower emetogenic chemotherapy has improved the situation. Despite the existing literature, several gaps were found in the nurses' understanding of the impact of CINV on QOL. How do nurses effectively improve the QOL after administering chemotherapy? When is the appropriate time for nurses to intervene to decrease the impact of CINV on the QOL. In order to fill the gap in the nurse's body of knowledge, a scientific systematic approach is needed to test nursing interventions that are suitable to

improve QOL, in order to achieve that. Further studies are needed to achieve a better understanding about the QOL in patients who suffer from CINV.

## References

1. Brigitte Bloechl-Daum Panagiotis Mavros, Mogens Hansen, and Jørn Herrstedt (2006). "Delayed Nausea and Vomiting Continue to Reduce Patients' Quality of Life After Highly and moderately emetogenic chemotherapy despite antiemetic treatment." *Journal of clinical oncology*
2. Perwitasari et al, (2012). "Impact of Chemotherapy-Induced Nausea and Vomiting on Quality of Life in Indonesian Patients With Gynecologic Cancer." *International Journal of Gynecological Cancer* 22(1).
3. Perwitasari G., Atthobari J, et al. (2011). Anti-emetic drugs in oncology: pharmacology and individualization by pharmacogenetics. *Int J Clin Pharm*, 33, 33-43.
4. Enzo Ballatori et al, (2007). "The impact of chemotherapy-induced nausea and vomiting on health-related quality of life." *Support Care Cancer* 15(179-185).
5. Gómez et al, (2012). "Chemotherapy-induced nausea and vomiting in clinical practice: impact on patients' quality of life." *Support Care Cancer* 14: 3141-3148.
6. Javier et al, (2006). "Chemotherapy-induced nausea and vomiting in acute leukemia and stem cell transplant patients: results of a multicenter, observational study." *haematologica/the hematology journal* 91(1).
7. Jordan et al, (2010). "Impact of quality of life parameters and coping strategies on postchemotherapy nausea and vomiting. ECC\_1099 603..609." *European Journal of Cancer Care* 19: 603-609.
8. Cohen et al, (2007). "Chemotherapy-induced nausea and vomiting-incidence and impact on patient quality of life at community oncology settings." *Support Care Cancer* 15: 497-503.

9. Majem M, M. M., Calvo N, et al. (2010). Perception of healthcare providers versus patient reported incidence of chemotherapy-induced nausea and vomiting after the addition of NK-1 receptor antagonists Support Care Cancer, 15, 23.

Melville, E. A., Kleijnen J (2009). Management of gynaecological cancers. Qual Health Care, 8, 270-279.

10. Molassiotis et al, (2012). "The impact of chemotherapy-related nausea on patients' nutritional status, psychological distress and quality of life." Support Care Cancer.

11. U.S. Food and Drug Administration (2003). Center for Drug Evaluation and Research Gastrointestinal Drugs Advisory Committee, from <http://www.fda.gov/OHRMS/DOCKETS/ac/03/transcripts/3928T1.doc>

# CHANGES IN COGNITIVE AND FUNCTIONAL STATUS OF THE HOSPITALIZED ELDERLY AND THEIR RELATED FACTORS: A CROSS-SECTIONAL STUDY

Shahin Salarvand (1)  
Yadollah Pournia (2)

(1) Instructor; Faculty Member of Hepatitis Research Center, Lorestan University of Medical Sciences, Khorramabad, Iran  
(2) Instructor, Faculty of Medicine, Lorestan University of Medical Sciences, Khorramabad, Iran

## Correspondence:

Shahin Salarvand  
Instructor; Faculty Member of Hepatitis Research Center, Lorestan University of Medical Sciences, Khorramabad, Iran  
**Email:** shsalarvand@gmail.com; shsalarvand@lums.ac.ir

## Introduction

In mid-2004, about 10% of the world population, namely 606 million people, were aged 60 years or older (1), and this number will exceed 1.1 billion people by 2025 (2). According to the 2007 census in Iran, this country has become an old country, having more than 7.2% of the elderly aged over 60 (3). Determining care priorities in this group is of great importance because of their visits to emergency departments for medical treatment, and their costly health care, therapy, and rehabilitation services (4). Care and concern for the elderly cannot be limited to a single principle, but it can be implemented optimally through joint efforts (5). Demographic studies have shown that approximately 5% of people aged 65 and over suffer from significant cognitive impairments. The incidence of the disorder after the age of 65 doubles every five years, so that it exceeds 40% in the population aged 80 years old and over (6). In addition, it is estimated that the number of elderly with functional decline will nearly triple by 2050 (3). Physical and cognitive performance disorders represent two of the most frightening conditions in the elderly because they can lead to physical dependence and social isolation (7). Melzer, as mentioned in Adibhajbagheri et al., states that one-third of the elderly suffer from cognitive impairment, and more than 60% of them need help in their daily activities (8). The multi-dimensional nature of physical performance emphasizes the complexity of its investigation. The connected nature of physical and cognitive performances highlights the importance of cognition in investigating physical performance in the elderly (7). On the other hand, hospitalization has been identified as a critical event in the life of the elderly (9), and optimal cognitive performance is a crucial factor for improving and maintaining the mental health and life quality

## Abstract

**Introduction:** Since desirable cognitive and physical performances are vital factors to promote and preserve the quality of life for the elderly, the present study was conducted to investigate concurrent changes in functional and cognitive status of the hospitalized elderly and their related factors.

**Materials and Methods:** This descriptive cross-sectional study was conducted with a sample size of 400 people chosen through availability sampling. The data was collected through two questionnaires. The first questionnaire consisted of two parts, including the demographic characteristics and the 6-Item Cognitive Impairment Test (6CIT), and the second questionnaire was the Barthel Index.

**Results:** The results showed significant relationships between disease diagnosis and age with cognitive status,

between age and diagnosis type with functional status, and between functional decline and cognitive status in daily activities of the elderly. Moreover, the odds ratio of unhealthy cognitive status in the elderly with functional decline (or dependent functional status) was about 8 times the ratio in the independent functional status.

**Conclusion:** There are concurrent changes in functional status in daily activities, and cognitive status of the hospitalized elderly. This study showed that 8 out of 10 of the hospitalized elderly patients suffered from varying degrees of undesirable cognitive status.

**Key words:** functional status, cognitive status, elderly, hospital



of the elderly (10). Psychological evaluation is performed to determine the quality of elderly people's consciousness and awareness of their environment, and the levels of their confusion, delirium, or dementia (11). In addition, patients with impaired cognition on admission have less compatibility with the risks associated with hospitalization, show less willingness for medical treatment, and tend to have more problems in reporting drug side effects (12). The risk of functional decline or disability is also higher in elderly patients because hospital environments are not often compatible with the special needs of this population (9). On the other hand, determining the overall score for daily living activities and level of independence in these activities is important, can determine the overall health status of an elderly person, and can function as an appropriate guide to provide classification and type of services for the elderly (13). The goal of nursing is to maintain and enhance the functional status of the elderly and to help them in identifying and applying their abilities in order to achieve optimum independence (5). The elderly people need constant care and supervision when they lose their abilities to perform their simple daily activities (14), and the nurse helps them to maintain their personality and maximize their independence (5). Therefore, the assessment of cognitive and physical performance in hospitalized elderly patients is essential, and it is hoped that the results of the present study will be effective in improving care programs in hospitalized elderly patients. The present study was conducted to investigate the coincident changes in functional and cognitive status in hospitalized elderly people and their related factors.

### Materials and Methods

This descriptive, cross-sectional (correlational) study was conducted with a sample size of 400 persons in 2012. After the official permissions were taken from Lorestan University of Medical Sciences, Iran, for visiting the hospital, the sampling was performed through the

availability sampling method. The data collection was performed with the joint help of two questioners (nurses). All the elderly patients (60 years and over) who were admitted to the hospital wards were sampled at one point of time. The two questioners, when aware of the hospitalization of an elderly patient in the hospital, attended the hospital and did the sampling through surveying the elderly patient and completing two questionnaires. The sampling was performed from the winter of 2011 and continued to the beginning of the summer of 2012. All the ethical considerations were regarded and the elderly patients unwilling to participate in the study were excluded.

The data in this study was collected via two questionnaires. The first questionnaire consisted of two parts including the demographic characteristics, and the 6-Item Cognitive Impairment Test (6CIT), and the second questionnaire was the Modified Barthel Index. Concerning the reliability and validity of these tools, since the 6-Item Cognitive Impairment Test (6CIT) has been applied in various studies including in a study by Hatfield et al., and because it does not contain any cultural components, its reliability and validity have been confirmed (15). The maximum score for this scale is 28. Subjects with a score of 0-7 are of normal cognitive status, and those with a score of 8-28 are considered to have undesirable cognitive status or cognitive impairment. The Modified Barthel Index is applied to assess a persons' daily performance in daily activities, and their mobility. The index has 10 items, including the questions related to eating, bathing, grooming, dressing, controlling urine and feces, using the toilet, transferring from the bed to the chair and the reverse, mobility on smooth surfaces, and using the stairs. The major goal of this scale is to assess the level of independence from any physical or verbal help and for any reason, and a need for supervision in a patient's activities signifies dependence. However, the patients using aids such as crutches, etc. is

not a barrier to independence. The various items of this modified scale have scores from 0 to 3, with a total of 20 scores. The Barthel Index scoring is as follows: Scores lower than or equal to 4 are evaluated as completely dependent, scores of 5-8 as highly dependent, scores of 9-11 as almost dependent and doing things with help, and scores of 12 or more as completely independent. The reliability and validity of the scale have been confirmed in several studies (4, 16). The data was analyzed by the SPSS 17 software using descriptive statistics, the chi-square, the Fisher's exact test, and the logistic regression models.

### Results

In this study, out of a total of 400 elderly people who participated in the study, 175 (43.8%) were male and 225 (56.2%) were female. The mean age and standard deviation was  $76.28 \pm 8.3$ , including 10.3% in the age range of 60-64 years, 12% in the age range of 65-69, 13% in the 70-74 age group, 26.3% in the 75-79 age group, and 38.4% in the age range of 80 and over, with the highest frequency in the group of 80 and over. The study also found the reasons for the admissions to be cardiovascular (40.3%), respiratory (26%), psychiatric (9.5%), and gastrointestinal diseases (6.5%), respectively. Moreover, 66.8% of the patients were hospitalized in the internal ward, 18.5% in the emergency department, 1.5% in the eye and ear ward, 8% in the CCU, and 5.3% in the surgical ward, with the highest number of the elderly patients in the internal ward. The data showed that 245 (61.2%) and 155 (38.8%) samples were living in urban and rural areas, respectively.

In addition, 22.8% of the hospitalized elderly patients had normal cognitive status, and 77.3% had cognitive impairment, indicating the high importance of cognitive status investigation. Additionally, 58.5% of the patients aged 60-64 years, 73.1% of those aged 70-74 years, 75.2% of those aged 75-79 years, and 93.5% of those aged 80 years and over had cognitive impairment. There was a statistically significant



		Healthy	Cognitive impairment N (%)	Level of significance
Type of diagnosis	Cardiovascular	42(26.1%)	119(73.9%)	X <sup>2</sup> =11.4 P=0.023
	Respiratory	19(18.3%)	85(81.7%)	
	Psychiatric	2 (5.1%)	37(94.9%)	
	Internal	21(29.6%)	50(70.4%)	
	Others	7(28%)	18(72%)	
Ward	Internal	56(21%)	211(79%)	X <sup>2</sup> =13.603 P=0.009
	Emergency	16(21.6%)	58(78.4%)	
	Eye and ear	5(83.3%)	1(16.7%)	
	CCU	9(28.1%)	23(71.9%)	
	Surgical	5(23.8%)	16(76.2%)	
Functional status	Completely dependent	0(0%)	38(100%)	X <sup>2</sup> =20.5 P<0.001
	Highly dependent	2(10.5%)	17(89.5%)	
	Almost dependent	1(4.5%)	21(95.5%)	
	Completely independent	85(27.2%)	228(72.8%)	

**Table 1: The relationships between some characteristics and cognitive status in the hospitalized elderly**

relationship between age and cognitive impairment ( $p=0.001$ ), showing that the percentage of cognitive impairment in the higher age groups was higher than that in the lower age groups. Concerning functional status, 9.7% of the elderly patients were completely dependent, 4.8% were highly dependent, 5.6% were almost dependent, and 79.8% were completely independent.

The data presented in Table 1 shows that there were significant relationships between cognitive status and disease diagnosis, meaning that there was a significant difference at least between the percentage of cognitive impairment in the patients with cardiovascular and internal diseases, on the one hand, and the percentage in those with respiratory or psychiatric diseases, on the other hand. More investigation is required to understand the relationship between cognitive status and each type of diagnosis (Table 1). The results also showed that 79% of the patients hospitalized in the internal ward,

74.4% of those in the emergency department, 76.2% of those in the surgical ward, 71.9% of those in the CCU, and 16.7% of those in the eye and ear ward suffered from cognitive impairment, showing a statistically significant relationship ( $p=0.009$ ). The prevalence rates of cognitive impairment, in descending order, were in the internal, emergency, surgical, CCU, and eye and ear wards, respectively. The chi-square test results showed that the percentage of cognitive impairment in the eye and ear ward was lower than that in the other wards (Table 1).

Moreover, 62.3% of the men and 88.9% of the women suffered from cognitive impairment, showing that the rate of cognitive impairment in the women was significantly more than that in the men ( $p<0.001$ ). Also, 80.6% of the elderly patients living in rural areas and 75.1% of those living in urban areas were cognitively impaired, showing no significant difference ( $p=0.198$ ).

The vast majority of the studied population (over 99%) had elementary school education or were illiterate, including 310 (77.5%) illiterate patients, 86 (21.5%) patients with elementary school degrees, 1 patient with a junior high school degree, 1 patient with a senior high school degree, and 2 with associate degrees. Therefore, assessment was not possible in terms of educational level.

The findings showed a significant relationship between age and functional decline ( $p=0.004$ ), and the highest dependence was for the patients in the age group of 80 and over. No significant relationships were found between gender ( $p=0.902$ ), rural and urban place of residence ( $p=0.253$ ), and type of ward ( $p=0.160$ ) with the rate of functional dependence, while a significant relationship was found between diagnosis type and functional status ( $p<0.001$ ) (Table 2 - top of next page).

		Completely dependent	Highly dependent	Almost dependent	Completely independent	Total	Level of significance
Age	60-64	2(5.3%)	1(5.3%)	2(9.1%)	33(10.5%)	38(9.7%)	X <sup>2</sup> =28.9 P=0.004
	65-69	3(7.9%)	0(0%)	1(4.5%)	41(13.1%)	45(11.5%)	
	70-74	2(5.3%)	2(10.5%)	2(9.1%)	46(14.7%)	52(13.3%)	
	75-79	6(15.8%)	4(21.1%)	3(13.6%)	91(21.9%)	104(26.5%)	
	80 ≥	25(65.8%)	12(63.2%)	14(63.6%)	102(32.6%)	153(39%)	
	Total	38(100%)	19(100%)	22(10%)	313(100%)	392(100%)	
Gender	Male	17(44.7%)	9(47.4%)	11(50%)	134(42.8%)	171(43.6%)	X <sup>2</sup> =0.57 P=0.902
	Female	21(55.2%)	10(52.6%)	11(50%)	179(57.2%)	221(56.4%)	
	Total	38(100%)	19(100%)	22(100%)	313(100%)	392(100%)	
Place of residence	Rural	26(68.6%)	14(23.7%)	16(72.7%)	184(58.8%)	240(61.2%)	X <sup>2</sup> =4.08 P=0.253
	Urban	12(31.6%)	5(26.2%)	6(27.3%)	129(41.2%)	152(38.8%)	
	Total	38(100%)	19(100%)	22(10%)	313(100%)	392(100%)	
Ward of hospitalization	Internal	31(81.6%)	15(78.9%)	16(72.7%)	200(63.9%)	262(66.8%)	X <sup>2</sup> =16.73 P=0.160
	Emergency	2(5.3%)	2(10.5%)	4(18.2%)	64(20.4%)	72(18.4%)	
	Eye and ear	0(0%)	0(0%)	0(0%)	6(1.9%)	6(1.5%)	
	CCU	1(2.6%)	0(0%)	2(9.1%)	29(9.3%)	32(8.2%)	
	Surgical	4(10.5%)	2(10.5%)	0(0%)	14(4.5%)	20(5.1%)	
	Total	38(100%)	19(100%)	22(10%)	313(100%)	392(100%)	
Type of diagnosis	Cardiovascular	7(18.4%)	5(26.3%)	11(50%)	135(43.1%)	158(40.3%)	X <sup>2</sup> =135.5 P<0.001
	Respiratory	1(2.6%)	4(21.1%)	5(22.7%)	92(29.4%)	102(26%)	
	Psychiatric	23(60.5%)	3(15.8%)	1(4.5%)	11(3.5%)	38(9.7%)	
	Internal	4(10.5%)	4(21.1%)	4(18.2%)	57(18.2%)	69(17.6%)	
	Others	3(7.9%)	3(15.8%)	1(4.5%)	18(5.8%)	25(6.4%)	
	Total	38(100%)	19(100%)	22(10%)	313(100%)	392(100%)	
Cognitive status	Healthy	0(0%)	2(10.5%)	1(4.5%)	85(27.2%)	88(22.4%)	X <sup>2</sup> =20.58 P<0.001
	Cognitive impairment	38(100%)	17(89.5%)	21(95.5%)	228(72.8%)	304(77.6%)	
	Total	38(100%)	19(100%)	22(10%)	313(100%)	392(100%)	

Table 2: The relationships between demographic characteristics and cognitive status in the hospitalized elderly

		Odds ratio	Level of significance
Functional status	Independent	1 (Reference)	-
	Dependent	9.57	0.001
Age	60-64	1 (Reference)	-
	65-69	0.89	0.832
	70-74	3.75	0.017
	75-79	2.97	0.006
	80 ≥	17.5	0.001
Gender	Male	1 (Reference)	-
	Female	9.06	0.001
Place of residence	Rural	1 (Reference)	-
	Urban	2.28	0.013
Ward of hospitalization	Internal & Eye and ear	1 (Reference)	-
	Emergency	1.38	0.425
	CCU	1.08	0.884
	Surgical	5.56	0.025
Type of diagnosis	Psychiatric	1 (Reference)	-
	Cardiovascular	0.28	0.141
	Respiratory	0.61	0.565
	Internal	0.31	0.184
	Others	0.26	0.179

**Table 3: Results of the analysis of the factors associated with cognitive impairment using the logistic regression model**

The results presented in Table 2 show a significant relationship between functional decline and cognitive impairment in the elderly patients' daily activities, showing 100% of cognitive impairment in the completely dependent patients, 95.5% in the almost dependent ones, 89.5% in the highly dependent ones, and only 72.6% in the completely independent patients (Table 2).

In addition, the analysis of the data showed statistically significant relationships between cognitive status and each of the items of

the Barthel Index including eating, bathing, transferring from the bed to the wheelchair and the reverse, getting up from the bed, mobility, grooming (shaving, brushing, wearing make-up, combing hair, washing the face, etc.), controlling urine and feces, dressing, climbing up and down the stairs, using the toilet, and bathing ( $p = 0.000$ ).

The study also showed that the odds ratio of cognitive impairment in the patients with functional decline (or dependent functional status) was approximately 9.57 times the ratio of independent functional status, and,

on the contrary, the odds ratio of functional decline in the patients with cognitive impairment was 8.7 times the ratio of healthy cognitive status (Tables 3 and 4).

### Discussion

The findings showed that 91 of the subjects (22.8%) had scores lower than 7 (healthy cognitive status), and 309 patients (77.3%) had scores of 8 and over (cognitive impairment), showing the high prevalence of cognitive impairment in the hospitalized elderly patients. Based on a study by Taban et al., the relative frequency of cognitive



		Odds ratio	Level of significance
Cognitive status	Healthy	1 (Reference)	-
	Unhealthy	8.7	0.001
Age	60-64	0.57	0.327
	65-69	0.29	0.066
	70-74	0.37	0.037
	75-79	0.35	0.007
	80≥	1 (Reference)	-
Gender	Male	1.71	0.092
	Female	1 (Reference)	-
Place of residence	Rural	1.42	0.286
	Urban	1 (Reference)	-
Ward of hospitalization	Internal & Eye and ear	1 (Reference)	-
	Emergency	2.30	0.062
	CCU	2.29	0.220
	Surgical	1.11	0.0873
Type of diagnosis	Psychiatric	1 (Reference)	-
	Cardiovascular	0.11	0.001
	Respiratory	0.05	0.001
	Internal	0.12	0.001
	Others	0.19	0.014

Table 4: Results of the analysis of the factors associated with functional decline using the logistic regression model

impairment ranged from 10% preoperatively to 29.1% postoperatively (17).

Our findings showed a statistically significant relationship between age and cognitive impairment ( $p < 0.001$ ), showing a higher rate of cognitive impairment in the higher age groups than that in the lower age groups. The results of research by Abolghasemi et al. confirmed the finding, that aging can affect cognitive and meta-cognitive processes significantly and that it increases the possibility of cognitive disorders through affecting cognitive performance (18). Taban et al's

study showed the effect of aging on increased incidence of postoperative cognitive disorders. Most studies have considered aging as a risk factor for cognitive impairment (17). These studies have shown that older subjects suffer from more distraction, weaker concentration, more memory problems, find it harder remembering names and contents, and more oversights (18).

The results of the present study showed that cognitive impairment in the women was significantly more than that in the men ( $p < 0.001$ ). Taban et al. revealed that there was no significant difference

preoperatively between the relative frequencies of cognitive impairment in both genders, so that they were 9.7% in the men and 10.4% in the women. However, the rate in the men was more than that in the women postoperatively, showing no consistency with the results in our study (17). In a study carried out by Nejati et al, 3.33% of the women were found to have severe cognitive impairment, and 18.33% and 62.13% of the men and the women, respectively, had moderate cognitive impairment, meaning a higher rate of cognitive impairment in the women than that in the men, and showing consistency with our results (12). The results of the study by Abolghasemi



et al showed that the mean score for cognitive impairment in the elderly men was significantly higher than that in the elderly women (18). Dirik et al's study found that the elderly men had higher cognitive performance than the elderly women (19).

Our findings found the most common diseases in the elderly hospitalized patients to be cardiovascular, respiratory, psychiatric, gastrointestinal, and musculoskeletal. The most common diseases in the elderly in Isfahan, as reported by Salarvand et al., were arthritis, visual impairment, and hypertension, respectively (20). Mohtasham Amiri et al's study showed the most common causes for admission of the elderly, to be cardiovascular diseases, trauma, respiratory diseases, eye disorders, cancers, cerebrovascular diseases, and infectious diseases. As mentioned in Mohtasham Amiri et al's study, previous studies have reported the most common causes for admission of the elderly to be cardiovascular diseases, cancers, pneumonias, and cerebrovascular events (2).

Our results also revealed that cardiovascular, musculoskeletal, respiratory, psychiatric, blood, endocrine, and obstetric diseases increased cognitive status in the elderly significantly ( $p=0.049$ ). Conducting more studies in this regard is recommended. Gussion et al, as mentioned in Salarvand et al's study, reported osteoarthritis, strokes, heart diseases, and depressant symptoms as having the greatest impact on the performance of the elderly (20). In the present study, a significant relationship was found between cognitive impairment and ward of admission ( $p=0.009$ ), so that the highest rates of cognitive impairment were observed in the internal, emergency, surgical, CCU, and eye and ear wards. Moreover, no significant relationship was found between urban and rural place of residence and cognitive impairment ( $p=0.198$ ), and no relevant studies were found in this regard.

A significant relationship was found between age and type of diagnosis with cognitive impairment, with the highest rate of dependence in the age range of 80 and over. Other studies have also confirmed that aging increases the rate of severe and moderate disabilities in the elderly (8).

In the present study, gender, urban and rural residence, and ward were not found to have significant relationships with functional dependence, while Dirik et al's study indicated that the elderly women, compared to the elderly men, had a lower level of mobility and were more dependent in their daily activities (19). Also, Adibhajibagheri et al showed significant relationships for age, gender, and place of residence, showing more moderate and severe disabilities in women than in men, more severe disabilities in cities than in suburbs, and more moderate disabilities in suburbs than in city centers (8).

Our findings found a significant relationship between cognitive impairment and dependence in daily activities in the elderly, showing cognitive impairment in 100% of the completely dependent elderly, 95.5% of the almost dependent ones, 89.5% of the highly dependent ones, and only 72.6% of the completely independent patients. Other studies have confirmed this finding, including Stuck et al's study reporting a strong relationship between cognitive impairment and functional decline (21). Also, Raj et al's study reported that the elderly people with lower cognitive performance had a greater chance of failure (58% more) in the activities of daily living (ADL) (22). In Kazemi et al's study, the more cognitive impairment the subjects had, the lower functional scores they obtained. Therefore, there was a significant relationship between cognitive status and activities of daily living (23). Moreover, Arcoverde et al found that physical activity and optimal physical performance were associated with the lower prevalence and incidence of dementia and cognitive impairment (24). Stuck

et al showed a strong relationship between cognitive impairment and functional status (25).

Concerning the relationship between the components of cognition scores and activities of daily living, the highest relationship was found between performance activity and activities of daily living. It confirms the finding reported by some researchers that interference with activities of daily living possibly occurs in more advanced stages of cognitive impairment. Yan Hoon et al in their study concluded that functional decline is common in nursing homes, and that more attention should be paid to the elderly with dementia right from the admission time (26). The findings of Dirik et al's study showed that functional status, cognitive status, and motility decreased in the elderly patients hospitalized in institutions (19).

Since the relationship between cognitive impairment and functional impairment was sought in the present study, the assessment of the relationship with drug type was not possible due to the consumption of multiple medications by the elderly patients, and this was one of the limitations of the present study. The second limitation of our study was the application of the availability sampling method, which made causative relationships impossible.

### Final conclusions and recommendations

In this study, we investigated the concurrent changes in functional and cognitive status of the hospitalized elderly. There was a significant relationship between functional decline in daily activities and cognitive impairment. The study showed that 8 out of 10 of the hospitalized elderly patients suffered from varying degrees of undesirable cognitive status, and this disorder was associated significantly with age, gender, ward, type of diagnosis, and educational level. Improvements in performance, mobility, and cognitive status should be among the first priorities of geriatric

rehabilitation, and initial evaluation of cognitive and functional status is essential in the assessment of the elderly in caring institutions. Independence in functional activities and an independent life-style should be taken into account in the elderly. Moreover, more research is needed to identify the mechanisms that increase the vulnerability of functional decline, and causative relationships between impairments in physical performance and cognitive performance.

## References

1. Lee TFD. Quality long term care for older people: a commentary. *Journal of Advanced nursing*. 2005; 52(6): 609-619.
2. Mohtasham Amiri Z, Toloei MH, Farazmand E. Causes of patients' hospitalization in Guilan University hospitals. *J MED FAC GUILAN UNIV MED SCIENCES*. 2002; 42(11): 28-32. [In Persian]
3. Mohammadi F, Dabagi F, Yadavarenikravesh M. Facilitating and barrier factors in fragile elders' family caring at home: the experience of women caregivers. 2007;2(6):445-453. [In Persian]
4. Shahhosiny S, Tagdisy H, Rahgozar M, Fadayevatan R. Relationship between Barthel Index scoring in admission time and elders patients' clinical findings in discharge time. *Iranian Ageing Journal*. 2008; 3(9, 10): 60. [In Persian]
5. Smeltzer SC. Medical-surgical nursing (Elders' diseases). Translated by: Tabari F. Tehran, Boshra Publication; 2005.P:15. [In Persian]
6. Frogan M, Jafari Z, Shirinbayan P, Gaem magame farahani Z, Rahgozar M. Validation study of Mini-Mental State Examination (MMSE) in elders living in Tehran. *J Advances in Cognitive Sciences*. 2008; 10(2):29. [In Persian]
7. Tabbarah M, Crimmins EM, Seeman TE. The relationship between cognitive and physical performance: Mac Arthur studies of successful Aging. *Journal of Gerontology Medical Sciences*. 2002;57A(4): M228-M235.
8. Adibhajbageri M, Akbari H. Severity of disability and its related factors in elders. *Journal of Feyz*. 2009; 13(3): 225-234. [In Persian]
9. Pedone C, Ercolani S, Catani M, Maggio D, Ruggiero C, et al. Elderly patients with cognitive impairment have a high risk for functional decline during hospitalization: The GIFA study. *Journal of Gerontology: MEDICAL SCIENCES*. 2005; 60A, 12: 1576-1580.
10. Nejati V, Ashayeri H. Assessing relation between cognitive disorders and depression in elders. *Iranian journal of Aging*. 2006; 1(2):8-15. [In Persian]
11. Haffman G. Geriatric nursing. Translated by: Heidarali Abedi et al: Ooroj, Isfahan University of Medical Sciences, 2003. [In Persian]
12. Miller CA. Nursing for wellness in older Adults theory and practice. Philadelphia; Lippincott Williams & Wilkins. 2004.
13. Nejati V, Ashayeri H. Assessing relation between cognitive disorders and depression in elders. *Iranian Journal of Aging*. 2006; 1(2):8-15. [In Persian]
14. Taylor F. The principles of nursing in wards. Translated by; the faculty members of Shahid Beheshti Medical Sciences University. Tehran: Boshra & Tohfef; 2003. [In Persian]
15. Hatfield CF, Dudas RB, Denning T. Diagnostic tools for dementia. *Maturitas*. 2009; 63:181-185.
16. Karbakhsh M, Zargar M, Eshadi Z, khaji A. Mechanism and outcome of hip fracture: a multi-center study. *Tehran University Medical Journal*. 2006; 64(7):37- 46. [In Persian]
17. Taban H, Ahmadzadeh GH, Tavasoli M. Cognitive disorders in elders before and after surgical operation. *J Hormozgan University of Medical Sciences*. 2003; 7(3):136-137. [In Persian]
18. Abolgasemi A, Kiamersi A. Assessing relation between supra cognition and cognition failure in elders. *J Advances in Cognitive Science*. 2009; 11(1):8-15. [In Persian]
19. Dirik A, Cavlak U, Akdag B. Identifying the relationship among mental status, functional independence and mobility level in Turkish institutionalized elderly: Gender differences. *Archives of Gerontology and Geriatrics*. 2006;42(1):339-350.
20. Salarvand SH, Meraci M, Ghaedi F, Zamani M. Prediction risk of falling in hospitalized elders in Esfahan, 2009. *J Kordestan University of Medical Sciences*. 2010; 35(2): 25. [In Persian]
21. Stuck AE, Walthert JM, Nikolaus T, Bula CJ, Hohman C, Beck JC. Risk factors for functional status decline in community living elderly people: a systematic literature review. *Social Science & Medicine*. 1999;48(1): 445-469.
22. Raji MA, Al Snih S, Ray LA, Patel KV, Markides KS. Cognitive status and incident disability in older Mexican Americans: findings from the Hispanic established population for the epidemiological study of the elderly. *Ethn Dis*. 2004 winter; 14(1):26-31.
23. Kazemi H, Gasemi S, Sharifi F, Fakhrzadeh H, Gaderpanahi M, Mirarefin M, Forogan M. Relationship between cognitive status and functional ability in elders living in Kahrizak nursing home. *Iranian J. Aging*. 2009;4(12): 16-25. [In Persian]
24. Arcoverde C, Deslandes A, Rangel Az, Rangel An, Pavao R, Nigri A, Engelhardt E, Laks J. Role of physical activity on the maintenance of cognition and activities of daily living in elderly with Alzheimer's disease. *Arq Neuropsiquiatr*. 2008; 66(2-8):323-327.
25. Stuck AE, Walthert JM, Nikolaus Th, Bula CJ, Hohmann C, Beck JC. Risk factors for functional status decline in community- living elderly people: a systematic literature review. *Social Science & Medicine* 1999; 48: 445-469.
26. Yan Hoon A, Au SYL, Yap LKP, Ee CH. Functional decline of the elderly in a nursing home. *Journal of Singapore medicine*. 2006; 47(3):219.

# COMMUNICATION IN VERBAL HAND-OVER REPORTS: NURSES' EXPERIENCES FROM IN-PATIENTS HOSPITAL UNITS IN SAUDI ARABIA - QUALITATIVE STUDY

Haniha Alyamany

## Correspondence:

Haniha Alyamany

Email: alyamany-haniha@hotmail.com

## Abstract

**Background:** Nurses as professionals provide care for patients in many areas of health care, from disease prevention to curative care. Nurses are communicating with each other and with other health care workers, in order to provide good nursing care for the patients. Communication between health care team workers requires competence and awareness of communication skills, for the safety and the well-being of the patients. Any failure in communications between health care team workers can directly or indirectly affect the patient negatively. The area of verbal hand-over reporting is considered as an important part of health care. Verbal handover reporting enables the exchange of patient information, and handing over nursing care responsibilities from one shift to another shift. Communication between nurses is a very important part in daily nursing care practice and can affect the quality of care, especially if there is miscommunication between the nurses which can affect patient safety.

**Aim:** To describe nurses' experiences of communication during verbal hand-over reporting, on in-patient units.

**Method:** Qualitative, semi-structured open ended interviews were carried out with ten participants. Content analysis method is used to analyse the data in this study.

**Result:** The result of this study was shown according to the main themes which were selected. Three themes were identified from the data as a result of the nurse's experiences during communicating the verbal hand-over reporting: Advantages of verbal communication in nursing hand-over reporting, challenges of verbal communication in nursing hand-over reporting, and the impact of verbal hand-over reporting on nursing care were studied.

**Conclusion:** The hand-over verbal communication experienced between the nurses had many advantages which can be connected with nurses' satisfaction in providing high quality care and that this reflects positively in patient's satisfaction and safety. The points considered as challenges are related and connected to; miscommunication, misunderstanding, incomplete patient data and language issues. The advantages and challenges shown in the result section of this study are important factors to be taken into consideration, for further research in the area of communication in hand-over reporting. Further research in the field can lead to improved safety and quality of care for patients in hospitals in Saudi Arabia.

**Keywords:** Hand-over report, nursing communication, verbal hand-over reporting, nursing shift reporting

## Introduction

Nurses constitute the largest group of health care providers in most countries in the world. Nurses as professionals provide care for patients in many areas of health care, from disease prevention to curative care (Oulton, 2006). Although nurses are the largest group of health care providers, many hospitals have a shortage of professional nurses which can in turn affect patients' care. As a result of this, many countries throughout the world are striving to improve staffing levels of professional nurses in their hospitals (Buchan & Calman, 2004). Saudi Arabia is one such country which has a shortage of nursing staff. The government is now working intensively in the area of nurse education and nursing practice to improve the situation. Saudi Arabia started its own health education programmes in Riyadh in 1958. The main goal was to increase the number of trained Saudi national nurses working within the health care services (Almalki, FitzGerald, Clark, 2011). The Ministry of Health has shown that Saudi Arabian nationals represent less than one quarter of the workforce in the health care sector in Saudi Arabia (MOH 2008; WHO, 2006). Even though there is an increase in the number of graduated Saudi nurses, the majority of the nurses in Saudi Arabia are recruited from abroad, in order to cover the shortage of nurses. There are therefore many challenges faced in these multi-cultural workplaces, which include clashes of beliefs and value systems which can be different from the Saudi culture (Mebrouk, 2008). There are even challenges in the areas of communication within the health care facilities. English is the official recognised language used in the health care sector in Saudi Arabia. Most of the nurses working in the services, both Saudi and non-Saudi, have English as a second or even as a third language. This can lead to gaps in communication between nurses and



patients, since most of the patients are Saudi nationals and are native Arabic speakers (Simson, Butler, Al-Somali & Courtney, 2006).

## Background

### Nursing

Nursing entails providing care to; promote health, prevent illness, to recuperate health, and eliminate patients' suffering. In addition nurses have the responsibilities to provide care with respect for the individual and provide equality in the care given for the patients and their families (International Council of Nurses, 2006).

Nursing care is a way of enabling patients and empowering them, also by having communication skills with patients and other health care worker to be able to give the right information (Lewis, Heitkemper, Dirksen, O'Brien Bucher, 2007). The information received regarding the patients status through nurses or other health care providers is used to provide the high quality care and to solve patients' health problems. Therefore the good assessment by nurses can provide the correct information regarding the patients, that help nurses in having the full pictures of the patients' condition between the health care providers (Lewis, Heitkemper, Dirksen, O'Brien Bucher, 2007; Mayor, Bangerter & Aribot, 2011).

Nurses play an important role in ensuring patient safety. Nurses and health care providers are making the clinical diagnosis and taking the discussions, planning the care and treatment for the patients. Moreover, they are providing the care and intervention regarding the information they get about the patients. Therefore communication between the nurses is considered as a very important part in the care, because any incomplete information can cause harm for the patients' (Schuster & Nykoly, 2010). To ensure safety and quality of care for the patients, nurses are exchanging information between them and other health workers staff. The clinical

hand-over between nurses regarding the patients' assessment, diagnosis; and treatment that constitutes the hand-over, helps the nurses to achieve the patients' satisfaction and safety (S.M. Borowitz, Waggoner-Fountain, Bass, 2008). Patient safety is the way of providing safe care for the patients, which includes the prevention of medical errors and reaches the widespread support, and maintains safe practice by health care workers (Leape, Berwick, 2005).

### In-patient unit

An in-patient unit is the area where the patients are admitted to in the hospital. These patients are often coming to the unit directly from the Emergency department or from other clinics, to receive treatment and care given by health care professionals. The in-patient units are categorized according to specialties and if they are medical units or surgical units (Evashwik, 2005; Williams & Hopper, 2011).

### Communication

The word communication comes from the Latin which is *communicatio* and that means the combined or alternate interchange and the *comminico* means division (Levinson & Chamumeton, 1999). People are communicating to exchange and share their ideas between each other and to find out what the other person is thinking and feeling which can build an intimacy to share and find solutions for their problems (McCarthy, 2011). Communications is used as a process of exchanging messages between two or more people, sender and receiver (McCarthy, 2011). Communication is considered as a primary need for the human being (Levinson & Chamumeton, 1999). Human communication is the way of sharing knowledge and experiences between people. Moreover communication is a basic ingredient of social behaviour. There are several forms of communication; language is one of these forms. Language as a form of communication for human beings include: speech, writing, gestures and broadcasting. Interpersonal

communication is the way of sharing the message between people which help in exchanging the meaning of this message between them (West, Turner, 2011). Moreover interpersonal communication can allow the person to gain knowledge and understanding about the individual. Therefore it is important in communication that there is clarity in the expression in order to receive the people's needs through the communication (Cypruss, 2011).

In communication a message has two parts, expressing verbal message of the sender which includes thought and feeling. Non-verbal is a message expressed through body language. In communication, verbal messages are sent through words, voice tone and rate of speech. Non-verbal communication includes messages sent by body language through for example facial expressions. Between the sender and receiver in communication there will be both verbal and non-verbal messages to transfer feelings and thoughts. Moreover each person in the communication will be the sender and receiver (Littlejohn & Foss, 2008).

The most usual activities in human life for people are the ability to talk and being understood. Communication is an important activity to human life; communication is considered as central to social life. In addition to this peoples' lives can be affected by the way of communication between people. Communication is an important term used in the English language; many schools have defined the term communication: one definition is "the process that links discontinuous parts of the living world to one another" (LittleJohan, Foss, 2008, P. 3). Some definitions of communication mentioned the message sent from the person to the message received by the other one; many meanings are included in the definitions about communication success, effectiveness, or accuracy. Communication is connected to the meaning of success, because



it is successfully sending the ideas between the people. Communication as a concept has no right or wrong meaning, it is dependent on the kind and prospect of the communication (Littlejohn, Foss, 2008). The fundamental unit in communication is made up of three parts; sender, receiver, and a message sent during the specific context. The message which is transferring the information from the sender to the receiver can be, in words as speech, like saying something or doing something like smiling. Therefore every message in the communication has content which can have meaning. In addition to this communication between two persons it has reason or history with a goal or future plan that can be affected by their previous experiences for each individual (Ellis, Gates & Kenworthy, 2003).

Communication is the main part of the human daily life and it's more important when it comes to health care. Communication in health care can mean the difference between life and death. In the nursing profession, communication is recognized as a main theoretical ingredient (Cypress, 2011). The relationship between health workers and how they receive the responsibilities of care relies on the quality of communication. Good communication in health care depends on many factors such as; the gender of the clients, the age, the level of education of the client and the health situation and their ability to communicate (Levinson & Chamumeton, 1999).

### **History of communication as an academic subject**

Communication was established as an academic subject after the First World War; it was promoted as a subject by the philosophers of the twentieth century. The development of communication helps the society to improve and have big social change. In the middle of the twentieth century communication became an important academic subject because of the notice it was given about what it can accomplish. Communication as an academic subject was incorporated

in many university departments as a subject in areas such as; Science, Arts, Mathematics, Literature, Business, and Political Science. Communication is a major concept right across the university curriculum, because it is a social activity between people and social processes which is an important factor in society. Moreover communication is considered as a factor which can make changes in different cultures in society. Communication provides the right way of understanding of human interaction (Littlejohn & Foss, 2008).

### **Forms of communication**

Communication is a composition of verbal and non-verbal attitudes integrated for sharing information; it also has a general meaning which is meta-communication. The information which is being exchanged is between individuals and it is also a way of carrying the information between the individual; it's the complete meaning of communication (Arnold & Boggs, 2007; Taylor, Lillis & LeMone, 2005).

### **Meta-communication**

Meta-communication is the mixing of verbal and non-verbal behaviour involved in the process of sharing information. It includes the exchanging of the information, culture, native language and body language with verbal and non-verbal communication (Arnold & Boggs, 2007).

Meta-communication is used to describe the factors that can affect the message during communication. Meta-communication is about how the person can explain the meaning of the message through both verbal and non-verbal communication. This can be shown in nursing communication during verbal communication which can also show respect for the patients through eyes contact, and body language such as head nodding. In meta-communication the people who communicate can transfer the positive and negative expressions. Therefore meta-communication can

be used as a method to control the way of communication (Arnold & Boggs, 2007).

### **Verbal communication**

The way of exchanging information by using words which include: both the methods of speaking and written words. This type of communication is dependent on the language which is the way of prescribing the use of words that can allow people to share information between them. Nurses are using this form of communication when they are providing care to patients or their families and when they are giving oral reports to nurses and health care workers (Taylor, Lillis & LeMone, 2005).

### **Non-verbal communication**

Transmission of information between people without using words is regarded as non-verbal communication. The usual term for this form is body language communication, which helps in finding the meaning which others cannot express in their words. Non-verbal communication can add more meaning to the verbal communication which can be shown in the face of the person all the expressions that they want to show to others. Nurses must be aware of other kinds of communication to be able to cover all the patients needs (Taylor, Lillis & LeMone, 2005). There is another communication method which is by telephone or other electronic means and that method of communication has reduced the effect of gestures and other non verbal communication (Riley, 2012).

### **Health care worker communication in hospital settings**

Health workers' communication skills are the execution of specific tasks and attitude to obtaining things like patients' history or exploring some diagnosis and prognosis, or giving some medical instructions. Communication between the health team workers requires competence and awareness of communication skills, because they need to send

clear messages between them which are related to the well-being of the patients. Failure in communications between health care team workers can affect patient safety (Duffy, Gordon, Whelan, Cole-Kelly, & Franel, 2004).

Communication is a very important part in the health field and can affect the quality of care if there is miscommunication between the health care workers. Communication between health workers includes health promotions, disease prevention and patients' assessment, diagnosis and treatment and even includes informal information. Moreover there is another area of communication for the health care worker which is communication with the patients and their families. There is evidence that the communication with patients directly or indirectly between the health care providers, affects patients' satisfaction (Servellen, 2009).

### Communication skills in nursing

The nurses communicate all the time with patients, their families and other members of the health care team (Riley, 2012). It is very important that the health care providers and nurses have good communication skills. Moreover, they should have the ability to be good listeners and encourage each other in the health team to provide effective communication in order to collaborate to provide high quality care to the patients (Schuster & Nykolyn, 2010). In addition communication and other factors such as leadership, and teamwork contribute toward patient safety. The most important of these factors is communication which is considered an important factor because effective communication completes the care from these other factors (Greenberg, Regenbogen, Studdert, et al. 2007).

### Hand-over reporting

The term hand-over refers to reporting; it is the transmutation and exchanging of information between the professional health

care workers either during change of shift duty or transferring of patients within the hospital or to other hospitals (O'Connell & Penney, 2001; Hohenhaus et al, 2006). The information which nurses are communicating with each other, during the change of shift, which relates to the patients, is called nursing hand-over report (Mitton & Donaldson, 2004). This is used for either controlling the patients' situation or handling information regarding the nurses' responsibilities for the patients' care. There are four types of nursing hand-over reporting; the hand-over in the nursing station, hand-over at the bedside of the patient, tape-recorded and written handover. The nursing handover is continually changing and is not restricted to one method, to achieve the best outcomes for the patients. Moreover the method of the handover between nurses depends on the number of patients in the unit. If the unit has a large number of patients in general the hand-over will take a long time, whereas if the patient numbers are small the nurses, are in general, giving the handover report in a short time (O'Connell & Penney, 2001; Hohenhaus et al, 2006).

Nurses are gathering information about patients during the shift exchange duty by different sources; they are taking the information from the last shift of nurses directly, or from the indirect dealing with other team workers, such as physiotherapist, managers and administration, pharmacies. The nurses are also gathering the patients' information through the patients themselves or from the patient's files, to collect the complete pictures about the patients (Llan, et al. 2012; Lyhne, Georgiou, Marks, Tariq, & Westbrook, 2012). Nurses provide the care to the patients twenty four hours; every shift nurses are handling the responsibilities of patient care. Hand-over is the way exchange of important information about the patients, such as clinical information of any new signs and symptoms, medical information, such as the disease's prognosis, important social information which

is related to the patients' satisfaction and wishes and daily nursing diagnosis and assessment with physicians orders and medications (Lyhne, Georgiou, Marks, Tariq, & Westbrook, 2012). The clinical hand-over report is considered as a basic tool of transferring the responsibilities and accountabilities surrounding the patient care from the nurses (and other health care workers) during their shift of duty (Johnson, Arora, Bacha, & Barach, 2011). There are many stages for the handover process between the nurses, such as the information which was gathered by the nurses, the preparation for the handover document and the handover meeting. Moreover the stages of handover are in process during changing of the shift between nurses and most of the hospital have three shift duties, which is eight hours on duty (Lyhne, Georgiou, Marks, Tariq, & Westbrook, 2012).

### Communication during patient hand-overs

There are different ways of communicating during hand-over reporting between the nurses. Some nurses are discussing each patient's case, others provide an update of necessary information about their patient's conditions (McCloughen, O'Brien, Gillies & McSherry, 2008). Hand-over reporting is considered as a routine forum of daily nursing communication during changing of the shift, or if nurses are taking their break or during transferring the patients to another ward. That communication between nurses regarding the patients is aiming to continue the patients' care by exchanging patients information about any change in the patients care or treatment (Manias, Aitken, Duning, 2005). The hand-over communication is covering all aspects of the patients' care, including the social needs of the patients regarding their wishes of involving their family or not, also the psychological needs to be supported by nurses or other health care workers (Randell, Wilson, Woodward, 2011).

In some hand-over situations the topic of communication and discussing between the nurses depends on the patients' situation and condition. Some cases, such as serious cases the discussion about information of the patients can cause harm to the patients (Kowalsky, Nemeth, Brandwijk, & Cook, 2004; Arora, Johnson, Lovinger, Humphry, & Melter, 2005). According to Lamond, (2000), in many studies they have mentioned that certain main issues regarding the patients cannot be documented by written hand-over documentation. Therefore nurses need to summarize the important patient information to find good ways of communication to hand-over the information to the next shift. It's important that the nurses are able to judge the patients' information priorities relating to the patients' conditions and situations. Moreover the hand-over communication between the nurses is not considered only as the patients complications and their serious situation it should also consider the features, thought and suspicions regarding the patients' situations and conditions including the patients' wishes regarding their care as well as considering the patients' safety. Nurses should be aware that handover is the meaning of transferring the responsibilities between them during the exchange of duty (Strople & Ottani, 2006). The handover between nurses includes important issues about the patients such as current clinical condition and the general judgment and evaluation regarding the patients, which helps the nurses to become familiar with the patient's sense and needs (Randell, Wilson, Woodward, 2011).

According to Pthier, Monteiro, Mooktiar & Shaw, (2005), the way of verbal communication during the hand-over can affect the patients' information which is transferred over to another shift especially if the unit has a high number of patients. The environment and the place of hand-over can affect the exchanging of information during the hand-over. Therefore nurses should have the ability to select a suitable place for their hand-

over communication (Manias and Street's, 2000). Moreover the time of the group nursing hand-over has to be structured to allow the nurses to be able to do a double check of the patients' charts and medication that allows nurses to involve patients during the exchange of their information in the bedside hand-over (Liu, Manias & Gerdztz, 2012)

### Methods used in nursing verbal hand-over reports

The communication between the health care workers is very important part in the care of the patients. This means effective communication is important between the nurses. Communication errors occur in health care and may be related to severe consequences. Certain health care errors can lead to unnecessary suffering and cost money and may even lead to death (Sutcliffe, Lewton, & Rosenthal, 2004). Moreover it can create other issues that affect the patients' satisfaction and affect the period of the patients' hospitalization (Pronovost et al., 2003). Therefore the health care professionals are looking for a way that can help in reducing communication error. There are many methods or models that can be used between health care workers to be able to cover the entire patient's information and having effective communication, such as briefings, debriefings, SBAR, Situation, Background, Assessment, Recommendation, assertive language, critical language, common, language, closed communication loops, active listening and callouts. All these methods are used as model of communication, in general for all health care workers, some are used only for a group of health care workers and some only in special situations, like explaining unprofessional behavior (Lo, 2011). The most useful method was used in health care settings and mentioned in the literature as a useful method and is used between health care workers during the communication, is a SBAR method which is related to Situation, Background, Assessment, Recommendation

and it is used as a standardized tool in America (Doucette, 2006). The SBAR tool was used in 2003 at Kaiser Permanente to organize the conversation between the physicians and nurses (Thomas et al., 2009). From that time the SBAR was used as a protocol between the health worker's communication in various healthcare settings. Moreover, the SBAR tool improved communication in the way of having a protocol for the communication between the health workers and having a common language and anticipation of what the communication will be (Haig et al., 2006; Hohenhaus, Powell, & Hohenhaus, 2006).

The SBAR as a tool is successful because it provides a standard way of communication between the health care workers during the usual stressful situation and environment, because the health care workers are facing situations that need rapid communication and exchanging a lot of information while they are under stress. Therefore that stressful situation can make them miss communication or give a wrong message. Therefore the SBAR method solved these problems between the health care workers (Woodhall et al., 2008).

SBAR protocol of communication is structured after four ingredients. The first one is the Situation which includes the name of the sender and the current patients' problems. Then there is the Background which includes all the patients' data from admission such as diagnosis and prognosis and the patients' history. Then there is Assessment which includes the subjective and objective data such as vital signs or pain complaints and the area of communication because it includes any changes in the patient. The last ingredient is Recommendation which regards the action, which are the suggestions given by the sender. Moreover the SBAR includes the nurse's chart about the patients' medications and laboratory tests (Woodhall et al., 2008)



## Types of hand-over

Hand-overs between nurses have many different methods to transfer the information between nurses. These types include the verbal communication, recorded hand-over, bedside hand-over report and written hand-over (O'Connell, Kelly & MacDonald, 2008; Scovell, 2010).

### Written hand-over

The written report is considered a legal report with the nurse depending on the information which is written including the written report nurses have on the verbal hand-over report either for the bedside or ward office hand-over (Scovell, 2010). The written hand-over may be as documented handwriting or as computerized word access. Moreover nurses during the verbal hand-over are using either a piece of paper or they have files for every patient, to use during communicating in the verbal hand-over report to remind them about the important information about the patient (Hardey, Payne & Coleman, 2000). The nurses have nursing documentation about all the updated information about the patients to allow nurses who are coming in the next shift to have a full picture about what happened to the patients during the last shift (Sexton et al, 2004)

### Verbal hand-over

The nurses are communicating during their exchange the end of the duty to hand-over their patients' information. Nurses are using verbal communication which is face to face gathering information between them. There is another way of gathering the verbal hand-over information between the nurses which is by telephone. In non verbal hand-over, nurses are exchanging the information through email and message systems and through fax for external contact (Lyhne, Georgiou, Marks, Tariq, & Westbrook, 2012). The topic of the hand-over communication includes discussion of the medical status of the patients such as reasons for admission, the needs of treatment and care, and how nurses can

organize the work. However the main important issues in verbal hand-over communication is the discussion regarding the patients health status; nurses are handing-over the patients feelings regarding their fairness' and patients' social needs (Mayor, Bangerter & Aribot, 2011). There are many studies that have focused on the affect of environment around the nurses during hand-over and nurses, during the exchange the patients' information need to have a good environment to be able to get a clear hand-over to provide good patient care (Hagler and Berm, 2008).

## Research Problem

Communication between nurses during hand-over is considered as an important factor which can affect the patients' care and safety. In many studies they identified that there are differences between what is written in the patients' document and what is reported verbally during the shift hand-over. The lack of communication between nurses during the hand-over can affect the patients negatively and interfere with patient safety (Sexton, Chan, Elliot, Stuart, Jayasuriya & Crookes 2004). Therefore the author is going to explore the nursing experiences of hand-over reporting in an in-patient unit setting where the official working language is English. The English language is often the second or third language spoken by the nurses. The author aims to discover issues which may have impact on the improvement of care and increase patient safety.

## Aim

To describe nurses' experiences of communication during verbal hand-over reporting, on in-patient units

## Method

### Qualitative method

Qualitative research is used to analyse the narrative data such as interview or dialogue (Polit & Beck, 2008). The qualitative content analysis used in nursing research is applied to the difference of the data and to interpreting the various

aspects of the data. Qualitative research depends on the narrative data or observations and the researcher will have the text written. Although there is written text most of the time it includes many meanings and there are different levels of the interpretation of the text (Graneheim & Lundman, 2004).

Content analysis has been used for a long time with communication, journalism, sociology, psychology and it is used in nursing research also (Elo & Kyngas, 2007). Qualitative content analysis is defined as "a research method for subjective interpretation of text data through the systematic classification process of coding and identifying themes or patterns" (Hsieh & Shannon, 2005, P. 1278).

Qualitative interviews with the content analysis method are used in this study investigating communication during verbal handover report: nurses' experiences from in-patient hospital units in Saudi Arabia. The data of this study was analysed by using the Graneheim & Lundman, 2004 step of qualitative content analysis in nursing research. To obtain more details the interviews were tape-recorded in order to assess the verbal interaction during the interview. The tape-recorded interviews provide accurate detail which cannot be obtained from the memory or by taking notes (Liamputtong & Ezz, 2005). Consent forms were obtained before starting the interviews and the participants in this study were given written information about the research time before the interview. The participants were gathered as a result of sending application forms to their hospitals' nursing education and research unit. The participating nurses in this study fulfilled the inclusion criteria and were approved by the head nurses of each in patient units. Then the researcher explained to all nurses in that unit during their shift exchange, briefly about the aim of the study and the interview question and the tape-recorded and that all the information would be handled in confidence (Kvale & Brinkmann, 2009).



## Data collection

The author applied to four hospitals in Saudi Arabia to conduct the research. There is one hospital who agreed to do the research directly, without having other specific demands, i.e. such as paying money or having a supervisor from their hospital only. After the ethical committee agreement and education and research units' agreement, the proposal was submitted to the in-patient units in that hospital, which included both medical and surgical wards. The head nurses of these units selected the nurses who were involved in the study. In August, 2012, the author started face to face interviews with staff nurses working at a large hospital in the Jeddah region in Saudi Arabia, with both medical and surgical units. A semi- structured interview with open ended questions was used during the interviews, which can help the participants to explain their experiences during their verbal handover communication report see Appendix (I). The interviews were held at a time which suited the nurses, in the nurses' workplace; the time of each interview was individual, with a range of between fifteen to thirty minutes (Kvale & Brinkmann, 2009).

## Participants

Ten nurses participated in this study; all of the participants came from different countries in Asia; the age group ranged between 25 years to 55 years of age, and were both male and female. All of the participants had English as second language and for some of them English was their third language. The interview was carried out and a tape- recorder was used to record the interviews for all of the ten participants. All the participants agreed that the interview could be recorded. The tape- recorder was checked before every interview to avoid any technical problems. The author was satisfied with the information that was taken from the ten participants. After six participants the data started to repeat itself; this is confirmed by Kvale & Brinkmann, (2009) as a means of knowing that your data

is complete. The inclusion criteria regarding the participants were covered by all the participants' years' experiences except one of the participants who had less than three years' experience. The interview was carried out in a conference room in the education department and research unit in the same hospital. All the participants who met the study inclusion criteria were selected by the head nurse of each in-patient unit. Written information regarding the study was given to the participants before the interview (Kvale & Brinkmann, 2009).

## Inclusion criteria

- Between eight to ten participants from four hospitals in Saudi Arabia.
- “ Nurses who work in adult in-patient units will be interviewed.
- The participants should have three or more year's experience working in Saudi Arabian Hospitals. According to Benner (2001), after three years of clinical experiences nurses can be regarded as experts in their field,
- Nurses who speak English in their working practice and are communicating in multi- national teams.

## Interview guide

In this study an interview guide was used. According to Kvale & Brinkmann, (2009) the structure of the interview questions is built close to a conversation, but carried out in a professional way in the form of an interview. The questions include a specific approach and style of questioning. All the interview questions are attached in Appendix II.

## Data analysis

In order to analyze the data the Graneheim & Lundman, (2004) the article was used by the author to gain an understanding in the way of analyzing the interview text data in the qualitative content analysis method. Then the author listened to the recorded interviews many times and made the data description into a document, and the author read the

documented interview many times, to understand the entire contents. The author analyzed the data manually according to the Graneheim & Lundman, (2004), content analysis method. All the data was extracted after interviews by verbatim transcriptions. The quotations were taken from the descriptive data randomly going through the entire interview answering of the questions. After that each sentence and paragraph was read several times, and all main ideas were coded to the specific meaning. For the words, sentences and paragraphs the meaning units were used. For meaning units condensed meaning units were used. Then the statements were used to condense the meaning unit interpretation of the underlying meaning according to the general ideas. Then all sub-themes were summarized to give meaningful themes of the data, which will be used in the finding of the research example of the data analysis as shown in Table one. All the process of the research data analysis was done under the supervision of the research supervisor.

## Content analysis

Content analysis was used according to Graneheim & Lundman, 2004, method of analysing and the steps of analysing the data were kept in a schedule shown in Table 1 (next page) as an example of the data analysis.

## Ethical Considerations

In this study the ethical issue which is related to professional nursing practice will be considered during the research for the good of the patients, and avoiding harm. In addition to that the responsibility of the researcher is to protect the participant from any unnecessary risk during participation in the study. That also includes any mental or physical discomfort. All nurses who participated in this study were unnamed and all the information regarding them or the patients was handled respecting their privacy and autonomy. A code was used to name the participants during the analysis so that the researcher can benefit

Meaning unit	Condensed meaning unit description close to the text	Condensed meaning unit interpretation of the underlying meaning	Sub-theme	Theme
<i>"In each handover I need to endorse these patients every things in each my shift"</i>	Giving complete information about the patients	communicating to cover all the information about the patients	Provides comprehensive communication	The advantages of the nursing handover verbal communication
<i>"It should be different to the verbal handover from the document"</i>	Differentiate between verbal handover and document	Recognizing another way of transferring the information	A compliment to the written report	
<i>"Verbal handover when the coming shift endorse and you are the nurse that will receive this, will give you a better picture of the patients"</i>	Verbal handover will give a better picture of the patient to the nurse	Better view for the nurse about the patient	Holistic view of the patient	

Table 1: Example of meaning units, condensed meaning units, sub-themes, and theme for the content analyses of the data of nurses' experience of communication in handover report (Graneheim & Lundman, 2004)

from the participants' experiences. All the participants were informed before the interview regarding the study and the consent for their participation was taken before starting the interviews; moreover the participants were informed that they can stop the interview at any time if they don't want to complete it. All the patients' information will be handled as privacy information (Speziale & Carpenter, 2007).

The study was carried after the approvals were obtained from the unit of biomedical ethics research committee in the participating Hospital and from the nursing education and research unit see Appendix (IV). The participants' information was handled according to the international council of nurses' code of ethics (International Council of Nurses, 2010). All the participants were informed that they can withdraw at any time from the study and they have the right to refuse that the interview was tape recorded. The author is responsible for all the recorded data to be kept confidentiality and secured for the next five years in order to be asked to review the data (Bankert & Amdur, 2006)

## Result

The results of this study are shown according to the main themes which were selected. Three themes were identified from the data: Advantages of verbal communication in nursing hand-over reporting, Challenges of verbal communication in nursing hand-over reporting, and the impact of verbal hand-over reporting on nursing care. The participants during the interview were using the word endorsement or endorse instead of hand-over and they mean hand-over.

### Advantages of verbal communication in nursing hand-over reporting

#### Provide comprehensive communication

The hand-over communication between the nurses is used as an easy way of providing clear information and communication between the nurses on in-patient units. Verbal hand-over communication reporting helps the nurses to communicate and exchange the patient's information in a comprehensive way to be able to have clear patient data.

*"In each hand-over I need to endorse these patients everything in each my shift"*

*"This while communication, this SBAR is very easy one by one, we can receive the endorsement, all the patient's data we will get it"*

*"They are physically giving us the full picture of what was going to the patients"*

#### A compliment to the written report

The nurses were aware that there is a specific way to communicate, to be able to have good communication during hand-over. They were able to differentiate between what they are going to communicate in the verbal report and in the written report. They were also aware about the method used during the communication in the hand-over, which helps them not to miss any information or waste their time with unimportant information.

*"It should be different to the verbal hand-over from the document"*

*"This is very nice (SBAR), it is nice for all the patient data"*

*"We are endorsing this one endorsing together with our focus"*

### Clarify information

During the communication in the verbal hand-over report nurses are clarifying information about the patients. Moreover they have the ability to ask the last shift nurses about any doubts or questions they made have.

*"You understand the way she endorse to you is very clear crystal clear"*

*"We are getting more information sometimes"*

*"Sometimes this verbal I like this verbal handover or endorsement, because you will know what are what is the, lacking one that she did not do and what is that... she did like that I like it too much"*

*"If we will have any doubts we will ask them now, so we will clarify that one, so we are not in doubt we know already the patient. If we doesn't know we will ask the one she will endorsing"*

### Holistic view

The verbal hand-over communication is a means of informing the nurse about what has happened during the last shift. Through this form of communication the nurse gains a clearer view about the patient's condition and situation.

*"Verbal hand-over when you, when coming shift endorse and you are the nurse that will receive, this will give you a better picture of the patients"*

*"You are not only imagination so physically you have the first view what is going on"*

*"Usually our hand-over, our endorsing to another staff it will be at the bed-side, so that we can see what the condition of the patients is; patient is ok stable or deteriorating"*

### Reminder to the nurse

Nurses are using the verbal hand-over communication as a reminder for them. Sometimes they are writing small notes during the verbal hand-over or they are depending on their memory to remember what was happening to the patients in the last shift. These notes help them not to need to go every now and then to the patient's files to check for any previous information.

*"If you are telling me something about the patient's condition it is happen it's done it is easy, so already in my mind"*

*"Communication verbal endorsement I like personally, because it will remember, remind you to do what is important"*

### Updating the nursing information

The verbal hand-over communication helps nurses in updating their patient's data and knowing more about their patients' conditions. Nurses do two shifts duties and when they are outgoing, or incoming they have to hand-over the entire important and updated patient's information to the other shift. During the day patients are having many procedures and the patient's condition prognosis will change. Therefore the communication during the verbal hand-over can update the nursing knowledge or information about what happened all the day to the patients.

*"Every shift will get the endorsement so that endorsement place whatever things we did for the patients also if any new things also we used to endorse the next shift"*

*"If I am reading from the file or something like that maybe I will not get as much about the patients"*

### Method of communication

In order to communicate and transfer the patient's data during their hand-over report the nurses are using a specific method to cover all important aspects of patient care during the communication. They are aware of this method, step by step, in order to provide the clear picture about the patients to the next shift.

*"It is very nice the SBAR. It nice for all the patient data we will receive, so the patient clinical complains, chief complain, relevant history, past history then the implementation, the recommendation what the important to solve patients condition the problems. It helps for us to make the patient comfortable"*

*"We are practicing SBAR so easy for us to yes its very helpful for all the history we will get while endorsement"*

*"This while communication this SBAR is very easy, one by one we can receive the endorsement all the patient data will get it"*

*"This is very nice the SBAR, it is nice for all the patient data"*

### Challenges of handover verbal communication

#### Time consuming

The handover communication can increase the workload on the nurses. Due to the amount of patients on the unit it can take a long time to carry out the verbal hand-over between the shifts. Moreover if there are critical cases or new admissions which need to have more explanation from the nurse to give the clear picture about that patient.

*"If the situation is busy we are having really hard time to endorse the patient"*

*"If the patient is so critical, like for example in my shift I just... you know assist the patients intubation like this is very, very long endorsement"*



"Some patient unstable patient with ventilator tracheostomy like that it will take more time; it is according to the patient's condition"

### Language issues

Most of the nurses come from different countries and have different levels of English; there are difficulties in understanding the different dialects and pronunciations when communicating through English during the hand-over report. Nurses sometimes have difficulty in understanding some of the pronunciation of other nurses if they have not the same nationality.

*"Their pronunciation is different the language is really different sometimes the way of endorsing"*

*"During the hand over the first time I receive from another shift. I have difficulty with the diction of different; we are working in multi nationality setting multi cultural setting"*

### Communication breakdown

In hand-over communication it is possible to have miscommunication or misunderstandings between the nurses. Nurses can explain something specific about the patient's condition but their colleague gets another understanding about this thing. This can in turn affect the patient's care, if the misunderstanding is not recognized.

*"When they fail to endorse then you will sometimes be surprise there is thing to be done to the patient but they did not endorse to me"*

*"It is possible to have communication error"*

*"Some people if I am telling something and you are listening something maybe when you listen you are getting something else but I mean something else"*

### Incomplete patient data

Nurses during the verbal handover communication can miss some

important information or the other nurses who received the information can miss something because they are only relying on the verbalized information. Therefore nurses can take incomplete data about the patients during the verbal communication.

*"Verbal handover sometime report maybe they missing because we are giving without file, maybe it will be something missing"*

*"Some people they are very lazy and if some people they are easily forgetting things, some people they are not very much interested in things so there will be error will happen so there is chance to get error"*

*"If I am not endorsing properly about my patient of course the other nurses cannot follow what she needs to do for the patients so there will be error"*

### The impact of verbal handover report on nursing care

#### Effective nursing care

The clear hand-over communication assists the nurse to provide effective nursing care. Because the nurses have all the patients' information and know about the patients' condition during the previous hours so they have obtained a full picture about what was the care that had been given to the patients. Moreover, they have clear pictures about what is the patients' needs that have to be covered by provide good care to attend those needs.

*"How you can provide effective nursing care if the endorsement is not clear, it should be clear"*

*"We will get the endorsement we know our care of this patient, what care is and what we will do"*

#### Managing the care

After the nurses have received their hand-over reporting (endorsement) regarding the patients. it helps them to prioritize. Therefore

having enough knowledge about their patients' condition during communicating in the hand-over report can give the nurse the confidence to provide the care. Moreover, verbal hand-over prepares nurses for their shift by providing the complete information and knowing about the patients conditions before starting the shift. This enables the nurses to have the ability to organize their care due to the information they get about the patients. This helps them prioritize the care depending on the patient's situations.

*"Communication verbal endorsement I like personally, because it will remind you to do what is important"*

*"That is the important thing when we communicating the good picture of the patient, so I can manage myself"*

*"We will receive the endorsement again so we can prioritize the work"*

*"Verbal handover if verbal also we writing it down know what ever to be done and we can check in between whatever is remaining and we prioritizing the work"*

#### Provide high quality of care

Hand-over communication helps the nurses in improving their work and provides care which incorporates patients' wishes with high quality care. Therefore nurses are communicating during the hand-over report to gain a clear picture about the patients in their units.

*"From the effective communication and giving a right data about the patient, and what happened in her shift that can provide an effective intervention and effective nursing care"*

*"We have to give them explain to the next staff that will easy, and we can give if we know about the patients details we can give good nursing care for the patient"*

*"Verbal handover is very important for me because it is giving clear picture a better picture to provide"*



*this good nursing care”*

### **Making care-plan**

The proper hand-over report helps the nurses to uphold care-plans because they will know all the patients' conditions and which case is serious and that helps them in providing nursing care plans. Nurses receiving the verbal hand-over report are making a plan for each patient that helps them in achieving their care-plan by the end of their duty

*“If I am endorsing properly of course the other people who is getting from me she knows what to do for the patient if she is aware about her nursing care she will best this is what I feel”*

*“After the endorsement we will get the, our patient ideas, know she is for what? so we will prepare according to the procedures”*

*“If I am endorsing properly of course the people who is getting from me she knows what to do for the patient if she is aware about her nursing care, she will do best, this what I feel”*

*“Handover prepares you, because you know what is your next action your next legal and your next quality intervention to be done for the patient for optimum health you what it to achieve for the patient”*

*“Definitely handover prepares you, because you know what is your next action your next legal and your next quality intervention to be done for the patient from optimum health want it to achieve for the patient”*

### **Patient safety**

Verbal handover communication can reduce the errors that can accrue due to the lack of patients' information being available. The nurses can ask during hand-over about specific things related to the patients, and if the patients received any emergency medication or has some special care due to their conditions or situations. Even though

all the emergency medication, etc. is documented in the patient's file, nurses need to underline these important things. Moreover, hand-over can help the nurses in taking the precaution for any cases that need to be isolated or need special care due to their case or condition.

*“If you get infected patient' to our ward also we have to get information so that we can take proper precaution for the patient”*

*“It is really important when you will be communicating, when you will have verbal communication, because you will prevent error, medication error anything any error that is very important”*

*“If some patient with some complicating some disease also while transferring also we have to take precaution and we have to inform them also”*

### **Feeling satisfaction about knowledge obtained**

After giving and receiving the verbal hand-over report the nurses having identified all relevant areas of knowledge about their patients, can feel relaxed and satisfied that they have a clear picture about the patients and their care.

*“For me I am taking the endorsement with highlight and when I finish my endorsement .It will be easy for me to just follow the patient care”*

### **Nursing care recommendation**

During the verbal hand-over communication nurses can suggest or recommend to other nurses something for the patient's care which can make the patients more satisfied or more comfortable.

*“Better suggestion Expectation that is important to solve the patient chief complain and all”*

### **Patient's satisfaction**

When the nurses have a clear and complete picture about their patients this helps in providing the

right care for the patients, moreover in verbal hand-over nurses can discuss special things about the patients which cannot be written in the patients' file which can better help the nurses reach the patients' satisfaction.

*“The patient is center here they are the one they are the rezone why we are having this work and their illness we have to provide good quality care”*

*“Communication for us, those who are experience here, I can talk Arabic also to a patient there will be good communication between me and my patient”*

*“Also with that communication patient can express their feeling and we can for the patient, we can tell them also and it is not only medication, so our tender loving care also, that will relive their agony”*

## **Discussion**

### **Method**

The method used in the study is qualitative method; semi-structured open ended questions were used to be able to explain any doubt of misunderstanding the interview question, or if the answers of the participants needed more clarification (Kvale & Brinkmann, 2009). The interviews were carried out with ten participants from one hospital in Saudi Arabia. The proposal was sent to four hospitals in Saudi Arabia to do the research in conjunction with them. The proposal submission time was during an official holiday period, which made it challenging to apply to do the research in the hospitals, because most of the employees were on vacation.

One of the hospitals requested that they provide a supervisor from their hospital to supervise the work and that it be voluntary, as it is not mandatory for any senior nurses in that hospital to supervise in any study. Therefore this hospital was excluded from doing the research with them because there was no one who would volunteer to be

supervisor for collecting the data in their hospital since I already had my university supervisor. In another hospital they requested a fee to conduct the research in their hospital, which made the author exclude it. In the third hospital all the applications were posted to them, but there was no reply. The fourth hospital which the data was collected from, agreed to participate when the formal application for the ethical approval and education and research department was completed.

The interviews were carried out after all the applications for approval were finalized. From every department on in-patients units two or three participants agreed to take part in the interviews. The author made a schedule for the participants to do the interview during their working shift. The interview was carried out in the education and research department conference room, so nurses took permission from their head nurse of their department to do the interview, which may have made some of the participants feel stressed to finish the interview.

No pilot study was carried out due to the time limitation to collect the data. After the first two participants were interviewed, they found the interview questions clear for them. All the participants agreed to do the tape-recorded interview; also all of them met the inclusion criteria of the study except one of the participants who had less than three years experience. Even though one of the participants had less than three years experience all the information collected from this participant was very useful and it answered the interview questions.

The author transcribed the data every day after the interview because that helped to remember all the interview discussion and details. After all the data was transcribed the recorded interview was reviewed many times for the accuracy of the information that was taken from the participants. All the data was transcribed and

the data was analyzed by using Graneheim & Lundman, 2004 step of qualitative content analysis in nursing research. This method of qualitative content analysis was used in this study because it is a method used for interpretation of the text data through the systematic classification process of coding and identifying themes or patterns from the narrative data which explained the experiences. Graneheim & Lundman, 2004, content analysis is based on Krippendorff, (1980) which is regarded as important literature concerned with the content analysis method and its use in viewing the data as texts, images, and expressions, which can be created to be seen, read interpreted and acted on, to have meaning. Moreover the term of content analysis is about 60 years old and is used in the English language (Krippendorff, 2013). The author has referred to a new book which is used in the content analysis method written by Krippendorff, 2013, which discusses an updated explanation of the content analysis method. Graneheim & Lundman, (2004) in their method of content analysis had summarized one way of using the content analysis method. The author contacted one of the authors of the article; Graneheim & Lundman, (2004), Graneheim in Umeå University, regarding their experiences of using content analysis and the reply was that they had used this method in 1300 studies and had good experiences of using it. No shortcomings of the method were mentioned!

The author has previous experiences of working as a nurse in Saudi Arabia that may affect the understanding of the narrative data which can be seen in trustworthiness and the credibility of the result (Hsieh & Shannon, 2005). In the qualitative content analyses the analysis focused on latent content, which dealt with the relation aspect in the data with the author's interpretation as to the meaning of the content (Graneheim & Lundman, 2004). The result was concluded after reading the data several times and making meaning units for all the highlighted sentences, and from that meaning

unit the condensed meaning units were used as sub-themes and categorizing the sub themes to have end themes which can be shown as a result for this study. The study highlights themes which are considered as important aspects of the communication between nurses during the verbal hand-over report e.g. the advantages of the hand-over report communication, the challenges of verbal hand-over report. This important aspect in the result agreed with different literature which had studied the same areas of the hand-over communication between nurses.

The author is speaking English as a second language and all of the participants also speak English as a second or third language, which makes the data analysis challenging. The author listened to the recorded data many times for the accuracy of the data transcription, which is required for rational responsibility (Munhall, 2007). The content analysis method was used to analyze the data in this study. Because this study is looking for the nurses experiences, the method used needed to have their opinions and explanation of their experiences. The content analysis is a good method that can be used to study the personal experiences (Elo & Kyngas, 2007). The method was used in this study for the identification of the themes which required analyzing the narrative sentences to meaning units then to condensed meaning units that have the main sub themes and themes (Graneheim and Lundman, 2004).

### Participants

The author did not include the gender and the age of the participants to keep all the participants' information confidential. The inclusion criteria of this study was with nurses who have experience in hospitals in Saudi Arabia more than three years, because the aim of the study is looking for the nurses experiences of communicating during verbal hand over in multi-cultural settings. The participants of this study were selected by their head nurse unit

which may affect the answers of the participants, in some way. Accidentally there was one participant included who did not have three years experience; they had less than one year's experience. The inclusion of this participant was very positive for the study result as this participant was facing for the first time, the issue of communicating in multi-nationalities in the work place. The data which was collected from this participant gave new thought and they discussed issues that experienced nurses had become used to and that were no longer an issue for them. It is an important issue which can awake many suggestions and solutions for the challenges which can face the newly assigned nurses. As a nursing researcher looking for the improvement of the nursing research areas recommended that in the communication area in nursing, it is important to study the experiences of the newly assigned nurses. This focus can help to improve communication issues which can affect patient's safety or the quality of care.

## Result

Three themes were discovered regarding the nurses' experiences during verbal hand-over report in the in-patient unit. The themes explained the nurses' experiences during communicating in the hand-over report which show the advantage for the nurses when they are communicating and the challenges which can face them during their communication in verbal hand-over reports. Moreover it shows the impact of hand-over communication has on the nursing care.

The participants in this study worked in multi-cultural workplaces and they are also from different nationalities and backgrounds, and speaking English as a second or third language, which increases their experiences of communicating with each other, according to one of these participants:

"During the hand-over the first time I receive from another shift, I have a

difficulty with the diction of different; we are working in multi nationality settings, multi cultural settings"

The result of this study includes different aspects of the nurses experiences of exchanges with the patients which can be related to the nurse's situation as working in a multi-nationalities work place and not speaking their mother language, some of these aspects are considered as general aspects in the communication between the nurses during the verbal hand-over report. All these nurse's experiences in this study can add to the quality of care and can enhance the patient's safety. Some aspects such as nurses needs to speak Arabic, which is the patients' language there, are arising from the results which can be considered by the hospital in Saudi Arabia for the improvement of patient care (Mebrouk, 2008).

## The advantages of the nursing hand-over verbal communication

The verbal hand-over communication between nurses is considered an important aspect to provide the care which can help the nurses to start their care, having a full picture about their patients. Nurses are exchanging the patients' information and responsibilities during the hand-over report to be able to cover all the patients' needs. According to Randell, Wilson & Woodward, (2011), the verbal hand-over communication is the way of insuring the transmutation of the necessary information including handling the responsibility from outgoing nurses to the incoming nurses between the shifts. That makes the nurses aware of what was done or given to the patients in the last twelve hours. Being aware of the patients situations helps the nurses to provide the care smoothly and achieve the patients' satisfaction with high quality of care. According to Hoban, 2003, all the information which had been transferred to the incoming shift has to be helpful for the nurses in order to be able to provide continuous patient care.

The nurses mentioned that there is documented information about all patients. Even though the patient's data is documented the nurses need to exchange the patient's information verbally because there is important information about the patients which cannot be written in the patient's files, such as special patients' needs. Therefore nurses had mentioned that the verbal hand-over report is giving the complete picture about the patient. The verbal communication and discussion about the patient's condition helps the nurses in assessing their patients and being able to connect between what was written in the file and what they receive from the verbal hand-over reporting (Strople & Ottani, 2006).

Even though the incoming nurses usually know most of the patients that they are receiving from the outgoing shift, because most of the patients in in-patient units are staying sometimes for one week or more which allowsthe nurses in the unit to become familiar with their conditions and history. The verbal hand-over communication updates the nurses' knowledge about the patients and the entire environment around the patients, which is covering what the nurses need to know about updated information (McCloughen, O'Brien, Gillies & McSherry, 2008). After the verbal hand-over the nurses have the current information about the patients that allows them to provide good care for their patients.

The nurses when they are communicating during the verbal hand-over are taking the information which can help them know about their patient's condition. Therefore the nurses need to be clear in communicating the patient data to give the exact patient situation and condition to the other shift. During the verbal hand-over report nurses are discussing the patients' conditions, updated medications and the prognosis of the disease and it also includes things to be observed during the coming hours, such as fluid intake and output. Moreover nurses are giving their suggestions



and recommendations about the care that needs to be provided to the patients or special patients' needs which cannot be documented in the patients' files. (Randell, Wilson, Woodward, 2011). Those suggestions and recommendations enhance the aspect of having clear information during the verbal hand-over communication which was mentioned by the participants in this study during the verbal hand-over communication. They are getting clear information about their patients, because they can ask about and discuss the patients' conditions and prognosis and if there are any important things to be done for the patients during the next coming hours of the shift. In addition the nurses in this study mentioned that the verbal hand-over report can help them in clarifying any doubt about their patients. Hand-over communication between the nurses provides clear practice about the patients and can be used as guidelines for the incoming shift (Edozien, 2011).

Hand-over communication according to the participants is providing a holistic view about the patients and the environment around the patients. Edozien, 2011, mentioned that the hand-over makes the nurse more aware of what happens to the patients and to the environment around the patients. Therefore the hand-over is enhancing the understanding of the nurses about the patients' needs which helps them in maintaining care for their patients, because the hand-over shows the whole picture about the patient.

In the result the nurses mentioned that the hand-over report is a way of helping nurses manage the care, because during exchange of the patients' information nurses came to know which the critical condition patients are and which patients need to be observed or the patients who have improved and have stable conditions. Therefore some nurses were taking notes on paper during the verbal hand-over report to help them remember everything about the patients and prioritize their work.

Nurses were aware of the tool or method that they were using during their verbal hand-over communication report, which helps them to transfer all the important information of the patients one by one, and becoming ready for handling the patients' responsibilities. The method used in that hospital is called SBAR and they are covering all the patients' aspects by using this method during the handing over the patients during shift exchange. Moreover having the standardized way of exchanging the patients' data will enhance the patients' safety and decrease the possibility of errors. The standardized way of transferring the patient responsibility and information between nurses can help nurses to have effective communication, which helps the nurses to ask and replay any information during the hand-over about any unclear patient data (Haig et al., 2006; Hohenhaus, Powell, & Hohenhaus, 2006). Additional to that, when the nurses are following the right tools or methods during handling the patients' responsibilities during exchanging the patients' data may reduce medical errors. The verbal hand-over communication report covers all that the nurses' need to know about the patient's information, situations and the environment around the patients. Therefore nurses after the hand-over report feel confident to start their work, because they know already from where they can start to apply the care. Moreover they know most of the patients' conditions and needs. Nursing satisfaction can reflect the patient's satisfaction which increases the quality of care and can cover all the patient's needs and wishes (Lo, 2011).

The participants in that hospital started to use the SBAR method six months back when it became a standardized method of reporting. The SBAR is an American method style of reporting used in American hospitals. Questions arise as to is this method useful to apply in a work place which is quite different from America especially when it comes to the language. Most of the nurses who are working in hospitals in

Saudi Arabia are speaking English as a second or third language which can create issues in communicating between the nurses who have a different nationality and diction in their spoken English. Even though it is a new method, most of the nurses have become familiar with SBAR as a method used during the hand-over communication. Moreover nurses mentioned that SBAR is used in communication with other health workers to exchange important information about the patients. To prove if this method is a suitable method to use in hospitals in Saudi Arabia further study and research needs to be done. Furthermore, it is important to evaluate (with an evaluation tool) the use of SBAR and measure the impact it has on health care outcomes.

### **Challenges of hand-over verbal communication**

Patient's condition or the number of the patients can affect the time of the hand-over report which can reflect on nurses starting their care for the patients (O'Connell & Penney, 2001; Hohenhaus et al, 2006). Most of the nurses had mentioned that having critical patients in the in-patient units makes the hand-over reporting longer than usual. However, the time of handing over the patients' information is time consuming but on the other hand nurses are assumed to have a clear and complete picture about their patients, especially in the critical condition patient. The awareness of the time of the hand-over can help the nurses in managing their work hour's duty. Even though the verbal hand-over report is considered as time consuming when there are critical patients, the verbal hand-over can also save time for the nurses because they are able to memorize most of the patients' information and are not looking to the patient's files every now and then.

Nurses working in a multi-cultural place of work can create challenges for the nurses during communication in the verbal hand-over report. The nurses are speaking the English language their second or third

language and difficulties may arise such as understanding different dialects and pronunciations. Moreover these differences in the diction of their English can cause misunderstanding between the nurses when they are exchanging the patient's information, however sometimes the misunderstanding can accrue with people having the same mother tongue language people. In addition to that misunderstandings can be due to miscommunication during the verbal hand-over, sometimes the communication between the nurses depends on the nurse's way of communication (Woodhall et al., 2008).

The nurses need to have communication skills to be able to transfer clear ideas to the other staff. Nurses mentioned that some nurses easily forget things and that can cause miscommunication, which affects the hand-over quality and can miss important information or things that relate to the patient's care and wishes. The most important aspect which can affect exchanging the patients' information during the verbal hand-over report is that some nurses are forgetting things (Nagpal, et al 2012). Therefore miscommunication can affect the patients' care and the nursing satisfaction of the work. According to Cypress, 2011, poor communication between the nurses when they are exchanging the patient's information can be shown as a negative health care outcome and it will affect the patients care. These challenges are connected to each other if one accrues the other things will happen and if the verbal hand-over communication causes misunderstanding and miscommunication that can lead to uncompleted patients' data especially verbalized information which can miss important information about the patients.

### **The impact of verbal hand-over report for nursing care**

Verbal hand-over communication can help the nurse to achieve patient satisfaction especially for

those nurses who can speak the Arabic language. One participant had mentioned that their ability to speak Arabic with her patients helps them understand the patients more and helps them to provide the right care for the patients, which can increase patient satisfaction. Verbal communication, involving the patients, can lead to a good outcome. The patient is central of the care and by knowing the patient's wishes about the care and treatments can help in satisfying the patients while enhancing the patient's health improvement. Therefore it is important that the nurse knows the patient's needs and wishes which helps the nurses to also be satisfied with the care they provided to the patients and their families. Involving the patients during the hand-over report gives the nurses better understanding about their patients. Patients also are able to express their feelings including the social needs when they are involved in hand-over reporting to the next shift (Llan, et al. 2012; Lyhne, Georgiou, Marks, Tariq, & Westbrook, 2012). Therefore in the hospital in Saudi Arabia they need to include a program which can help the nurses to learn Arabic to allow them to be involved with the patients and be able to understand the patient's feeling about the care that they are provided with. The meaning of providing complete nursing care includes good communication between the patients and the nurse who provides the care, because the nurses have to give good support to their patients (Llan, et al. 2012).

The nurses are working to gather data to protect and promote the health and wellbeing of the patients. One of the important roles in their care is communicating with each other regarding the patients' data which includes all the patients' details and information and most of this information is related to the patients' life (Nursing and Midwifery Council, 2008). Therefore the nurses are aware about the need to practice daily verbal hand-over communication report to be sure with the care that they are going to provide including the documented

patients' data. The hand-over report helps the nurses to create their care plans after receiving the verbal hand-over report from the outgoing shift. In in-patients units with a lot of patients and different procedures the verbal hand-over report helps nurses to cover all the important information and knowledge about the procedures that need to be done to the patients and what preparation the patient requires before that procedure.

Nurses also mentioned that they are receiving recommendations between them during the verbal hand-over report and that can help them in the care. Since the nurses in this study are using SBAR as a method of communication regarding the patients' conditions the nurses are encouraged to provide recommendations about the patient's care or about patient's wishes (Woodhall et al., 2008). However some patients feel comfortable with talking with one or two nurses in the unit, so this nurse can hand over the recommendation to the other nurses during the hand-over report and can exchange the recommendations to cover the patient's needs.

When the patients are admitted to the hospital they hope to get high quality care and to have treatment for their illness, or cure from their disease. Nurses are aware about the importance of patients' safety and if the patients are satisfied with the care that helps their improvement (Leape, Berwick, 2005). Patient safety is connected to quality of care provided by nurses. Therefore nurses are aware of the interests of providing clear communication and patients' data to each other between the shift exchange and knowing everything about the patients' care and their care needs. Moreover nurses are cooperating with each other to provide high quality of care. The question arises when talking about the quality of care the nurses are communicating during verbal hand-over, is it the way of the handover between the nurses helping the nurses in providing the quality of care or the content of this verbal hand-over whatever the form

of communication is (Kerr, 2002). Most of the nurses mentioned that both of these aspects are affecting the hand-over communication and can affect the care and patients' safety.

When the nurses are aware of the method of hand-over communication and have standardized methods to exchange the patient information and responsibilities they feel more confident in their provision of care for the patients whatever the patients' condition. Moreover the clear method used during the hand-over helps the nurses in memorize all the patients' data and that can reflect on the care because the nurses are able to prioritize their work, by knowing which patient is critical and which patient is stable. Moreover the nurses considered the verbal hand-over report as a complement of the documented report and both of them cover the patient's data and help the nurses in exchanging information between each other and receiving the patient's responsibilities. Nurses mentioned also that a hand-over report ensures them that all information which needs to be handed over to the other shift is covered which makes them satisfied with the knowledge they give or that they received.

Even though some nurses in the study mentioned that they are not receiving complete information about their patients and they are recognizing that after reading some information in the patient's file, that may be related to the nurses not handing over complete data or due to their way of communicating, it does not relate to the hand-over report as a means of sending clear and good pictures between the nurses.

## Conclusion

In this study the result shows the nurse's experiences during the verbal hand-over report in Hospital in Saudi Arabia. The study figured out the advantages and challenges when nurses are working in multi-cultural work places and having English as a

second or third language. The hand-over verbal communication experienced between the nurses had many advantages which can be connected with nurses' satisfaction in providing high quality care and that this reflects positively in patient's satisfaction and safety. The points considered as challenges are related and connected to; miscommunication, misunderstanding, incomplete patient data and language issues. The advantages and challenges shown in the result section of this study are important factors to be taken into consideration, for further research in the area of communication in hand-over reporting.

## Recommendation

### Further study

Family plays a large part in the Saudi Arabian culture and this does not end when a person is admitted to hospital. Most of the patients have their family in attendance with them in the hospital. The nurses in this study did not mention the patient's social aspects when they were talking about their experiences of the verbal hand-over communication. As a cultural country social life is considered as an important issue when discussing the patient's health information. Nurses who are working in Saudi hospitals have different backgrounds of cultural and hospital roles. Therefore as a recommendation for the hospitals in Saudi Arabia that they have training and education programmes for new nurses and provide basic courses in the Arabic languages and Saudi Arabian culture. These courses will help the nurses gain a deeper understanding of the patients' and their families' wishes about the care and treatment and it help the nurses to provide high quality care with confidence to achieve the patient's satisfaction.

## References

Almalki M., FitzGerald G., Clark M. (2011). The nursing profession in Saudi Arabia: an overview. International Council of Nursing. Arora V., Johnson J., Lovinger D.,

Humphry H., & Melter D. (2005). Communication failures in patient sign-out and suggestions for improvement: a critical incident analysis. *Quality and Safety in Health Care*, 14,401-407.

Arnold E. & Boggs K. (5th ed.). (2007). *Interpersonal Relationships: Professional Communication Skills for Nurses*. Philadelphia: Saunders Elsevier.

Bankert E. & Amdur R. (2nd ed). (2006). *Privacy and Confidentiality*. Institutional Review Board. Canada.140-146.

Benner P. (2001). (Commemorative Edition). *From Novice to Expert. Excellence and Power in Nursing Practice*. London: Prentice Hall.

Buchan J. & Calman L. (2004). *The Global Shortage of Registered Nurses: An Overview of Issues and Actions*. International Council of Nurses, Geneva.

Cypress B. (2011). Exploring the concept nurse-physician communication within the context of health care outcomes using the evolutionary method of concept analysis. *Dimens Crit Care Nurse*, 30(1):28-38.

Doucette J. (2006). View from the cockpit: What the aviation industry can teach us about patient safety. *Nursing*, 36(11), 50-53.

Duffy F., Gordon G., Whelan G., Cole-Kelly K. & Franel, R. (2004). *Assessing competence in communication and interpersonal skills: The Kalamazoo II report*. *Academic Medicine*, 79, 6.

Ellis R., Gates B., Kenworthy N. (2003). *Interpersonal Communication in Nursing: Theory and Practice*. Philadelphia: Churchill Livingston.

Elo S. & Kyngas H. (2007). The qualitative content analyses process. *Journal of Advanced Nursing*, 62(1), 107-115.

Evashwik C. (3rd ed.). (2005). *The Continuum of Long-Term Care*. United States of America: Thomson.

Edozien L. (2011). Structured Multidisciplinary Inter shift Handover (SMITH): A tool for Promoting safer intra partum care. *Journal of Obstetrics and Gynecology*, 31:683-



- 686.
- Greenberg C., Regenbogen S., Studdert D., Lipsitz S., Rogers S., Zinner M., Gawande A. (2007). Patterns of communication breakdowns resulting in injury to surgical patients. *The American College of Surgeons*, 01.0010.
- Graneheim U. & Lundman L. (2004). Qualitative content analysis in nursing research: concepts, procedures and measures to achieve trustworthiness. *Nursing Education Today*, 24,105-112.
- Hardey M., Payne S., Coleman P. (2000). 'Scraps': hidden nursing information and its influence on the delivery of care. *Journal of Advanced Nursing*. 32, 1, 208-214.
- Haig K., Sutton S., & Whittington J. (2006). SBAR: A shared mental model for improving communication between clinicians. *Joint Commission Journal of Quality and Patient Safety*, 32(3), 167-175
- Hagler D. and Berm S. (2008). Reaching agreement: the structure & pragmatics of critical care nurses' informal argument. *Contemporary Educational Psychology*, 33 (3), 403-424.
- Hoban V. (2003). How to handle a handover. *Nursing Times*, 99, 9, 54-55.
- Hsieh H.-F., & Shannon, S.E. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research*, 15(9), 1277-1288.
- Hohenhaus S., Powell S., Hohenhaus J. (2006). Enhancing Patient Safety during hand-off: standardized communication and teamwork using the SBAR' method. *American Journal of Nursing*, 106,72A-72B.
- Hohenhaus S., Powell S., & Hohenhaus J. (2006). Enhancing patient safety during hand-offs. *American Journal of Nursing*, 106(8), 72A-72C.
- International Council of Nurses. The ICN code of ethics for nurses. Geneva: International Council of Nurses, 2006, [http://www.icn.ch/images/stories/documents/about/icncode\\_english.pdf](http://www.icn.ch/images/stories/documents/about/icncode_english.pdf) (2006, accessed 25 August 2011).
- International Council of Nurses. Code of ethics. Retrieved October 17, 2010 from [http://www.icn.ch/images/stories/documents/about/icncode\\_english.pdf](http://www.icn.ch/images/stories/documents/about/icncode_english.pdf)
- Johnson J., Arora V., Bacha E. & Barach P. (2011). Improving communication and reliability of patient handovers in paediatric cardiac care. *Progress in Podiatric Cardiology*, 32,135-139.
- Kerr M. (2002). A qualitative study of shift handover practice and function from a socio-technical perspective. *Journal of Advanced Nursing*, 37, 2, 125-134.
- Kowalsky J., Nemeth C., Brandwijk B., & Cook R. (2004). Understanding sign out: conversation analysis reveals ICU handoff content and form. *Critical Care Medicine*, 32, A29.
- Krippendorff K. (3ed ed.). (2013). *Content Analysis: An Introduction to Its Methodology*. United Kingdom: SAGE.
- Kvale S. & Brinkmann S. (2009). *Interviews Learning the Craft of Qualitative Research Interviewing*. United tats of America: SAGE.
- Liamputtong P. & Ezz D. (2nd ed.). (2005). *Qualitative Research Methods*. Australia: Oxford.
- Littlejohn S., Foss K. (8th ed.). (2008). *Theory of human communication*. United States of America: Thomson.
- Lo L. (2011). Team work and communication in health care. A literature review. *Canadian Patient Safety Institute*, 1414, 10235 - 101
- Lyhne S., Georgiou A., Marks A., Tariq A., & Westbrook J. (2012). Towards an understanding of information dynamics of the handover process in aged care settings - A prerequisite for the safe and effective use of ICT. *Journal of Medical Informatics*, 01.013.
- Llan R., D Lebaron C., K Christianson M., K Heyland D., Day A., and D Cohen M. (2012). Handover patterns: an observational study of critical care physicians. *Health Services Research*. 12:11.
- Lamond D. (2000). The information content of the nurse change of shift report: a comparative study. *Journal of Advanced Nursing*, 31, 794-804.
- Lewis S., Heitkemper M., Dirksen S., O'Brien P., Bucher L., (7th ed.). (2007). *Medical surgical nursing assessment and management of clinical problems*. Philadelphia: Evolve.
- Leape L., Berwick D. (2005). Five years after to err is human: What have we learned? *JAMA*, 293:2384-2390.
- Levinson W. & Chamumeton N. (1999). Communication between surgeons and patients in routine office visits. *Surgery*, 125(2):127-134.
- LiuW., Manias E., Gerdtz M. (2012). Medication communication between nurses and patients during nursing handovers on medical wards: A critical ethnographic study. *International Journal of Nursing*, 49 (2012) 941-952
- Mayor E., Bangerter A. & Aribot M. (2011). Task uncertainty and communication during shift handovers. *Journal of Advanced Nursing*, 10.1111/j. 1365-2648.2011.05880.x
- Manias E., Aitken R., Duning, T. (2005). Graduate nurses' communication with health professionals when managing patients' medication. *Journal of clinical nursing*, 14(3), 354-362.
- Manias E., Street A., (2000). The handover: uncovering the hidden practices of nurses. *Intensive and Critical Care Nursing*, 16 (6), 373-383.
- McCarthy, B. ( 2011). *Hearing the person with dementia. Person- Centred Approaches to Communication for Families and Caregivers*. United States of America: JKP.
- McCloughen A., O'Brien L., Gillies D. & McSherry C. (2008). Nursing handover within health mental health rehabilitation - an exploratory study of practice and perception. *International Journal of Mental Health Nursing*, 17287-295.
- Mebrouk J. (2008). Perception of nursing care: view of Saudi Arabian female nurses. *Contemporary Nurse*, 28 (1-2), 149-161.
- Mitton C. & Donaldson C. (2004). *Health care priority setting:*

- principles, practice, and challenges. Cost Effectiveness and Resource Allocation, 2.3.
- Ministry of Health. (2008). Health Statistical Year Book. Ministry of Health, Riyadh.
- Munhall P. (4th ed.). (2007). Nursing Research: A Qualitative Research Perspective. Ontario: Jones and Bartlett Publisher.
- Nagpal K., Arora S., Vats A., Wong, H., Sevdalis N., Vincent C., and Moorthy K. (2012). Failures in communication and information transfer across the surgical care pathway: interview study. MBJ, 21:843-849.
- Nursing and Midwifery Council. (2008.) The Code: Standards of Conduct, Performance and Ethics for Nurses and Midwives. NMC, London.
- O'Connell B. & Penney W. (2001). Challenging the handover ritual: recommendations for research and practice. Collegian, 8, 14-18.
- O'Connell B., Kelly C., & MacDonald K. (2008). Nursing handover; it's time for a change.
- Contemporary Nurse, 30(1), 2-11.
- Oulton J. (2006). The global nursing shortage: an overview of issues and actions. Policy & Nursing Practice, 7 (3), 34s-39s.
- Polit D., & Beck C. (8th Ed.). (2008). Nursing research: Generating and assessing evidence for nursing practice Philadelphia: Lippincott Williams & Wilkins.
- Pronovost P., Berenholtz S., Dorman T., Lipsett P. A., Simmonds T., & Haraden C. (2003). Improving communication in the ICU using daily goals. Journal of Critical Care, 18, 71-75.
- Pothier D., Monteiro P., Mooktiar M. & Shaw, A. (2005). Handover. Pilot study to show the loss of important data in nursing handover. British Journal of nursing, 14, 1090-1093.
- Riley J. (7th ed.). (2012). Communication in Nursing. United States of America: ELSEVIER.
- Randell R., Wilson, S., Woodward P. (2011). The importance of the verbal shift handover report: A multi case study. International Journal of medical informatics, 80, 803-812.
- Strople B. & Ottani P. (2006). Can technology improve intershift report? What the research reveals. Journal of Professional Nursing, 22, 197-204.
- Sutcliffe K., Lewton E., & Rosenthal M. (2004). Communication failures: An insidious contributor to medical mishaps. Academic Medicine, 79(2), 186-194.
- Scovell S. (2010). Role of the nurse to nurse handover in patient care. Nursing Standard, 24(20), 35-39.
- Servellen G. (2nd ed.). (2009). Communication Skills for the Health Care Professional Concepts, Practice, and Evidence. London: Jones and Bartlett Publisher.
- Schuster P., & Nykolyn L. (2010). Communication for Nurses. How to Prevent Harmful Events and Promote Patient Safety. United States of America: F.A. Davis Company.
- S.M. Borowitz, L. Waggoner-Fountain, E. Bass, Sledd RM. (2008). Adequacy of information transferred at resident sign-out (in-hospital handover of care): a prospective survey, Qual. Saf. Health Care, 17, 6-10.
- Sexton A., Chan C., Elliot M., Stuart I., Jayasuriya, R. & Crookes, P. (2004). Nursing handover: do we really need them? Journal of Nursing Management, 12, 37-42.
- Simson E., Butler B., Al-Somali S. & Courtney M. (2006). Guiding the transition of nursing practise from an inpatient to a community-care setting: a Saudi Arabian experience. Nursing & Health Sciences, 8, 120-124.
- Speziale H. & Carpenter D. (4th ed.). (2007). Qualitative Research in Nursing. Advancing the Humanistic Imperative. Philadelphia: Lippincott Williams & Wilkins.
- Taylor C., Lillis C. & LeMone P. (5th ed.). (2005). Fundamental of Nursing. The Art and Science of Nursing Care. Philadelphia: Lippincott Williams & Wilkins.
- Thomas C., Bertram E., & Johnson D. (2009). The SBAR communication technique: Teaching nursing students professional communication skills. Nurse Educator, 34(4), 176-180.
- West R., Turner L. (2nd. Ed.). (2011). Understanding Intrapersonal communication: Thinking choices in changing time. USA. Wadsworth Cengage Learning.
- Williams L. & Hopper P. (4th ed.). (2011). Understanding Medical Surgical Nursing. United States of America: F.A. Davis Company.
- Woodhall L., Vertacnik L., & McLaughlin M. (2008). Implementation of the SBAR communication technique in a tertiary center. Journal of Emergency Nursing, 34(4), 314-317.
- World Health Organization. (2006). Country Cooperation Strategy for WHO and Saudi Arabia 2006-2011. World Health Organization, Regional Office for the Eastern Mediterranean, Cairo.

## APPENDIX I

### INSTRUMENT

#### Interview guide

In this study the interview was guided according to Kvale & Brinkmann, (2009); the structures of the interview questions were built to be conversational, , but in a professional way, such as an interview. The questions include a specific approach and style of questioning.

- 1- Describe the type of shift handover reporting used on your unit.
- 2- How much of your working time per shift, would you estimate, goes to handover reporting on your unit?
- 3- What are your experiences of communication during verbal handover reporting?
- 4- How does the verbal handover report prepare you to provide good nursing care during your shift?

## APPENDIX II

### PARTICIPANTS' INFORMATION

#### Research title

Communication in verbal handover report: Nurses' experiences from in-patient hospital units in Saudi Arabia. (Qualitative Study)

In this study the ethical issue which is related to professional nursing practice will be considered during the research to the good for the patients and nurses with avoiding harm.

All nurses who will participate in this study will be unnamed and all the information regarding them or patients' will be handle with respecting their privacy and autonomy.

Codes will be used to name the participants during the analysis so that the researcher can get the benefit from the participants' experiences.

All the participants will be inform before the interview regarding the study and the consent for their participation will be taken before starting the interviews.

The participants are able to leave the interview in any time if they don't want to complete in participating the study.

All the patients' and nurses information will be handled as privacy information any question that not clear can be explain to the nurses in interview, for nurses who speak Arabic language if they need to explain the unclear part of the question in Arabic that will be explain to them.

The researcher of this study is looking for nurses who are having experiences three or more than in hospital in Saudi Arabia.

Any unclear parts can be answer by the researcher of this study and nurses who participate in the study they have the right to ask.

#### Interview guide

In this study the interview guided according to Kvale & Brinkmann, (2009) the structures of the interview questions is build near conversation, but in a professional way as interview. The questions include a specific approach and style of questioning.

- 1- Describe the type of shift handover reporting used on your unit?
- 2- How much of your working time per shift, would you estimate, goes to handover reporting on your unit?
- 3- What are your experiences of communication during verbal handover reporting?
- 4- How does the verbal handover report prepare you to provide good nursing care during your shift?



**APPENDIX II** (continued)

This paper approve that you agree to participate in the study of communication in verbal handover report nurses' experiences from in-patient hospital units in Saudi Arabia an interview study.

I read the study proposal and I read the interview questions. Also I agree that they will use tape-recorded during the interview. After I had read all the qualifications of participation in the research, I have no objection to participate.

Name

Department

Signature

Researchers' information

Haniha Alyamany (nursing master student)

+46739366028

Haniha-alyamany@student.shh.se

Research supervisor

Marie Tyrrell (International Bachelor of Science in Nursing Programmer)

+46(0)8-4062878

marie.tyrrell@sophiahemmethogskola.se

# POLICY ANALYSIS OF VIOLENT BEHAVIOUR

## Abstract

**Aim:** This paper is aimed at evaluating violent behaviour in the psychiatric setting and to provide alternative policies for violent behaviour.

**Background:** The Violent Behaviour policy emphasises its need to fully outline the reasons for Considering Violent Behaviour in psychiatric setting, and describes how priorities will be determined for the purposes of interventions and optimal use of limited in-patient resources, and what alternative policies are needed to be more effective.

**Conclusion:** Violence towards mental health staff is prevalent and increasing in the psychiatric setting. There are alternative ways to reduce incidents of unsafe violent behaviour. This paper briefly sets out detail of alternative strategies to reduce violent behaviour.

**Key words:** Policy, Violent Behaviour, psychiatric setting.

**Mohammed Ahmad Almaani**

## Correspondence:

Mohammed Ahmad Almaani, RN, MSN  
Master in Psychiatric & Mental Health Nursing  
The Hashemite University  
Ma'an  
Jordan

**Email:** Mohammed.almaani@yahoo.com

## Introduction

The Violent Behaviour policy emphasises its need to fully outline the reasons for considering violent behaviour in the psychiatric setting, and describes how priorities will be determined, the purposes of interventions and optimal use of limited in-patient resources, and what alternative policies are needed to be more effective.

This paper attempts to provide policy analysis for violence in the psychiatric setting in Jordan, and the paper attempts to provide alternative policy recommendations for these issues by using a six-step policy analysis model which will verify and define the problem through implementing, monitoring and evaluating this policy.

## Step One : Verify, define, and detail the problem

On September 3, 2006, Wayne Fenton, a prominent schizophrenia expert was found dead in his office as a result of a tragic assault by his 19-year-old patient with Schizophrenia, (Anderson & West, 2011). Because of this situation and other cases that occur in the world and at any time, those working in the psychiatric setting must be more concerned about this problem and how to prevent violent behaviour and assaults by psychiatric patients against Mental health care provider. It is a reality and some staff rationalize that violence is an Occupational hazard (Anderson & West, 2011).

Violent behaviour may be defined as physical violence without bodily contact (e.g., threatening gestures) or physical violence with bodily contact (e.g., hitting, punching, kicking), (Lanza, Demaio, & Benedict, 2005).

Patients with serious mental illness (e.g. schizophrenia, major depression or bipolar disorder) were 2 to 3 times as likely as people without such illness to be assaultive, and it was found the nurses, and physicians reported the highest prevalence of violence against them among the clinical staff (Anderson & West, 2011), and the prevalence rates of physical assaults on psychiatric trainees was between 26% and 56% (Dhumad, Wijeratne, & Treasaden, 2007).

Many psychiatrists, those working in the emergency or acute setting, report direct experiences of violent behaviour among the mentally ill, (Stuart, 2003). The staff members who spend the most time with patients are at greatest risk of experiencing an assault, and those with the highest risks were the nursing personnel, (Anderson & West, 2011).

The crime and violence in the mentally ill were associated with the same factors thought to determine crime and violence in anyone else: factors such as gender, age, poverty or substance abuse, (Stuart, 2003), and the relationship between violence and positive psychotic symptoms was found equally in men

and women, (Anderson & West, 2011), 68% of the assaultive patients were 30 years old or younger, (Anderson & West, 2011).

The effectiveness response of violent behaviour is not to return to policies of greater control but to improve the care, support, treatment and to decrease violent behaviour in the psychiatric setting. The Violent Behaviour policy aims to assist in managing acute mental health in-patients by defining clear Violent Behaviour criteria and priorities, procedures to coordinate throughput and use of facilities, contingency plans for violence management at times of peak demand. Nurses, psychiatrists and other health care givers in the psychiatric setting, are concerned with prevention of violent behaviour.

### **Step Two: Establishing Evaluation and Implementation Criteria**

In order to establish the criteria, we should develop for evaluation, the desired and undesired outcomes. I also recommend the prevention of violent behaviour or the decrease of harm, and I will assess all the alternatives related to: effectiveness, legality, administrative ease, equality, cost benefits and political acceptability.

### **National center for psychiatry violent behaviour Policy Description**

**TITLE:** Violent Behaviour

**PURPOSE:** To identify the nursing staff's responsibilities for the violent patient.

**POLICY:** Some patients may at times become violent or unable to control their behaviour. All Nursing staff are responsible for recognizing and observing the signs of potential violent behaviour, reporting it to the appropriate staff, and acting within the Limits of their position description to protect with the least restrictive method, the patient, all other patients, visitors, and the staff. At all times, nursing staff will maintain the patient's rights and treat the patient humanely.

Generally the violent behaviour policy was clearly written to suit different reader's abilities except for some wards which are defined at the end of the written policy e.g. hospital authorities, medical record no., equipment and supply. The violent behaviour policy and procedure has a clear goal and purpose; it has a clear overview which includes violent behaviour resources and reasons.

### **Policy goal**

The major goal of violent behaviour policy is to decrease incidence of violent behaviour occurrence. This goal can be measured by the number of violent behaviour incidents.

### **Desirable and undesirable outcomes**

The major desirable outcome of violent behaviour policy for nurses, psychiatrists and care giver in the psychiatric setting are:

1. Increase the concerns in the care givers safety from violent behaviour.
2. Increase care giver satisfaction about the procedures.
3. Decrease incidence of violent behaviour occurrence.

The major undesirable outcome of violent behaviour policy for nurses, psychiatrists and care givers in the psychiatric setting are:

1. The difficulty in applying the procedures.
2. The high cost effectiveness in the organization.

### **The criteria of violent behaviour evaluation**

The goal of these rules is to assess violent behaviour and what it consists of: effectiveness will be the first item which will be considered and recommended of violent behaviour occurs, the second one is legality, the third is its ease of use, the fourth is its equity, the fifth its cost and finally is the political implications.

### **Effectiveness**

The affectivity is defined as the ability of the violent behaviour policy to achieve the best outcomes to be used as violent behaviour policy by psychiatrists, nurses and caregivers and it is a very clear policy when they are dealing with patients.

### **Legality**

Regarding adherence to or observance of the violent behaviour policy of the National center for psychiatry, it is legal to apply the policy because it is Certified by the ministry of health, so surely it is legal since it does no harm nor has undesirable effects.

### **Administrative ease**

Ease of applying the procedure of the violent behaviour policy by health workers during limited time in the National center for psychiatry, and its ease of use to restrain a violent patient and to have available all equipment to restrain in the National center for psychiatry and all instructions in this policy, need to be understood by the health worker.

### **Equity**

Equity means the violent behaviour policy is safe for: patient, nurses, psychiatrists and any caregiver in the National center for psychiatry.

### **Cost benefits**

Cost effectiveness of violent behaviour policy for National center for psychiatry; this policy does not cost the center because it uses little equipment to restrain and it uses the same equipment for all patients of violent behaviour.

### **Political acceptability**

This criteria is used to ensure there is no collision with the politicians in applying violent behaviour policy in the national center for psychiatry.

### **Step Three: Suggest Alternatives Policies**

For strategies or solutions to reduce incidence of violent behaviour occurrence and to reduce unsafe violent behaviour against nurses, psychiatrists and caregiver in psychiatric setting, I will mention the alternative strategies in this section and in the next section they will be assessed separately.



The following are alternative strategies to reduce occurrence of violence and reduce unsafe violence:

**1) Use of chemically restrained strategies,** likely perceives violence as an effective means to reduce unsafe violence with communication with patients during restraint, the chemical restraints or pharmaceutical restraints can help gain better control of the violent patient.

Drugs that are often used as chemical restraints include benzodiazepines (such as Lorazepam (Ativan), Diazepam (Valium)). Haloperidol (Haldol) is a drug chemically unrelated to benzodiazepines and is also popular for chemical restraint, without the potentially dangerous side effects of benzodiazepine drugs. However, Haloperidol has its own set of serious side effects.

**2) Use training strategies.** Basic nursing certification alone is not sufficient to equip nurses to be able to cope with aggressive residents. They need experiential education about violent behaviors, using role-play, with staff acting out verbal and physical aggression.

**3) Use sufficient staffing strategies:** sufficient staffing is a strategy for decreasing the incidence of abuse by decreasing stress on nursing. The nursing are more apt to deliver care in a rushed, rough, and hurried manner when assigned a large number of residents. Implementation of these policies may help the organization save money over time as the number of violent incidents decreases.

#### **Step Four :Assessment of Alternative Policies**

Assessment of all the alternative strategies on how to reduce incidence of violent behaviour:

**1) Use chemically restrained strategies:**

#### **Effectiveness**

Many studies showed evidence about the effectiveness of using chemical restraint or drugs such as (Haldol) to prevent violent behaviour, (Anderson & West, 2011); their studies indicated that it is safe to use chemical strategies for patients and health workers.

#### **Legality**

It is legal to use chemical restraint for this type of strategy using safe equipment and it is used by all hospitals subsidiary to the Ministry of Health.

#### **Ease of application**

It is easy to apply through administration of medication in different routes (IM, IV) to the patient.

#### **Equity**

This strategy is safe for violent patients and health workers and there are no reports of harm due to these strategies.

#### **Cost effectiveness**

According to health care budgets and some studies reported (Anderson & West, 2011) it is a low cost strategy to use chemical restraint.

#### **Political acceptability**

It is not to collide with the politicians in applying chemical restraint.

**2) Use training strategies:**

#### **Effectiveness**

Many studies showed evidence about the effectiveness of using training strategies through using role play and the need for effective training sessions to prevent violent behaviour; more studies indicated that it is safe to use training strategies for patients and health workers.

#### **Legality**

It is legal to use training strategies, it is safe and it is used by all hospitals subsidiary to the ministry of health in the continuous education unit.

#### **Ease of application**

It is easy to apply through role playing and training sessions with staff acting out verbal and physical

aggression; it is more realistic than traditional lecturing and encourages open discussion about feelings and the appropriateness of various management strategies.

#### **Equity**

This strategy is safe for violent patients and health workers and there are no reports of harm using these strategies.

#### **Cost effectiveness**

According to health care budgets and some studies it has been reported that training is a high cost strategy.

#### **Political acceptability**

It is not to collide with the politicians in applying training strategies.

**3) Use sufficient staffing strategies:**

#### **Effectiveness**

Sufficient staffing is a strategy for decreasing the incidence of violence by decreasing stress on nursing staff. This strategy is safe for use for by both patients and health workers.

#### **Legality**

It is v legal and safe to use sufficient staffing for this type of strategy and it is used by all hospitals subsidiary to the ministry of health.

#### **Ease of application**

It is easy to apply sufficient staffing of patient health workers.

#### **Equity**

This strategy is safe for the violent patient and health worker and there are no reports of harm using these strategies.

#### **Cost effectiveness**

According to health care budgets it is a low cost strategy to use sufficient staffing.

#### **Political acceptability**

It is not to collide with the politicians in applying sufficient staffing.

The following Table (1) summarizes the expected outcomes of the alternatives strategies:

Criteria	Financial	Incidence of violence
Alternative strategies		
Use chemically restrained strategies	Saves money	Fewer incidences
Use training strategies	High cost	Fewer incidences
Use sufficient staffing strategies	Lowest cost	Fewer incidences
Expected outcomes		

Table 1

Alternative	Effectiveness	Legality	Ease of applying	Equity	Cost effectiveness	Political acceptability
chemically restrained strategies	Highly effective	Legal	Ease	Yes	Depends on the drug	Acceptable
training strategies	Highly effective	Legal	Ease	Yes	Effective	Acceptable
sufficient staffing strategies	Partially effective	Legal	Ease	Not always	Effective	Acceptable

Table 2

### Step Five : Distinguish Among Alternatives Policies

After completely assessing all possible solutions to prevent or decrease incidence of violence and to completely distinguish among the alternatives will be discussed in this step of analysis.

Alternatives are effective enough to be used as a policy, partly to decrease incidence of violence; these solutions are: chemically restrained strategies, training strategies and sufficient staffing strategies.

The first strategy is the perfect solution to decrease incidence of violent behaviour as effectively as possible. Using this strategy all stages of violent occurrence can be managed. The nurses and psychiatrists who are the health providers most at risk to violence, will be safer when using chemically restrained strategies. The health workers will be safer than they were previously if this strategy is used, because the possibility of violent behaviour from patients will decrease and the workplace will become safer with effective chemical

restraint preventing occurrence of violent behaviour. The only weak point for this solution is the prevalence of side effects of some medications such as Haldol.

The second solution, is highly effective at preventing violent behaviour occurrence, so is the using of this strategy as a part of violent behaviour prevention.

The third solution as prescribed previously is partially effective so considering this policy as a solution will depend on the case of the patient and the number of staff, although it may help to decrease violent behaviour occurrences.

Table 2 (above) summarizes the evaluation of the alternative strategies:

### Step Six: Implementation and Evaluation Plan

In this step of implementation an evaluation plan was used before the implementation of the alternatives policy.

In order to implement the alternative policy a journal club will be

conducted to convince the health employees about the new solutions. After they know more about it they will surely adopt new ideas to use these types of alternative policy.

The employees will be able to test the effectiveness of the alternative policy, through training to apply the alternatives and any violent behaviour will be reported as usual. After the training on these alternatives, all employees of this department will apply the new modification for 2 months. The results of the incidence of violent behaviour reports will be compared with those of the past 2 months.

A specific questionnaire will be used to assess the employees' satisfaction in applying this policy. If the result indicates the effectiveness of the policy, with enough employee satisfaction, the real phase of implementation will be started and in order to apply it to the entire organization.

The policy evaluation will depend on two points: number of incidence of violent behaviour in comparison with previous incidence and the employee's satisfaction.

## Conclusion

The violence inflicted on mental health staff is prevalent and increasing in the psychiatric setting. There are alternative ways to reduce incidence of unsafe violent behaviour; this paper is a brief outline of alternative strategies to reduce violent behaviour.

## Recommendation

Using the above potential solutions as guideline, the following steps are recommended to prevent violent behaviour:

1. Require specific training about the causes and manage any behavioural problems.
2. Develop evidence based guideline for assessment and management of violent behaviour.
3. Should be used as a measurement tool to evaluate the effectiveness of violence policy.

## Acknowledgements

My deep appreciation and thanks also go to Prof. Dr. Majd Mrayyan, for his guidance, close supervision, and generous advice for completing this work.

## References

- Anderson A., & West S. (2011). Violence Against Mental Health Professionals: When the Treater Becomes the Victim. *Innovations in clinical neuroscience*, 8(3), 34-39.
- Dhumad S., Wijeratne A., & Treasaden I. (2007). Violence against psychiatrists by patients: survey in a London mental health trust. *Psychiatric Bulletin*, 31, 371-374.
- Lanza M.L., Demaio J., & Benedict M.A. (2005). Patient assault support group: Achieving educational objectives. *Issues in Mental Health Nursing*, 26, 643-660.
- Stuart, H. (2003). Violence and mental illness: an overview. *World Psychiatry*, 2, 121-124.



# PAIN EXPERIENCE AMONG PATIENTS RECEIVING CANCER TREATMENT: A CASE STUDY

## Abstract

Pain is the most concerning symptom found in patients who have malignant tumor, and represents the most feared consequences for patients and their families. Cancer related pain remains a challenge in cancer patients, their families, and oncology nurses due to lack of knowledge and assessment of pain which causes inadequate pain management.

Inadequate management of pain is the result of various issues that include: under treatment by clinicians with insufficient knowledge of pain assessment and therapy; inappropriate concerns about opioid side effects and addiction; a tendency to give lower priority to symptom control than to disease management; patients under-reporting of pain and non-compliance with therapy; and impediments to optimum analgesic therapy in the healthcare system.

**Key words:** pain experience, cancer related pain, cancer treatment, dimensions of pain.

**Bilal. S. H. Badr Naga**  
**Nijmeh. M. H. Al-Atiyyat**

Bilal. S. H. Badr Naga MSN, RN, BSN  
Nijmeh. M. H. Al-Atiyyat Ph.D, MSN, RN, BSN  
Department of Adult Health Nursing  
The Hashemite University  
Amman, Jordan

## Correspondence:

Bilal. S. H. Badr Naga MSN, RN, BSN  
Department of Adult Health Nursing  
The Hashemite University  
Amman, Jordan

**Email:** Bilal\_badrnaga@yahoo.com

## Introduction

Pain is the most concerning symptom found in patients who have malignant tumor, and represents the most feared consequences for patients and their families (Charles & Cleeland, 2006). Cancer related pain remains a challenge in cancer patients, their families, and oncology nurses due to lack of knowledge and assessment of pain which causes inadequate pain management (Winslow, Seymour, & Clark, 2005).

The prevalence of cancer-related pain is high: 64% in patients with metastatic or terminal disease, 59% in patients on anticancer treatment and 33% in patients who had been cured of cancer (Everdingen, Rijke, Kessels, Schouten, Kleef, & Patijn, 2007). Also, in Jordan, the incidence of new cancer cases is high; it was reported that a total of 6214 new cancer cases were registered by Jordan National Cancer Registry (JNCR) in 2008; of these, 4606 cases (74.1%) were among Jordanians (Jordan Cancer Registry, 2008). Based on these statistics which reflects high incidence of cancer patients in Jordan, it is significant to study the issue of cancer-related pain experience to understand the pain management issues to promote quality of life of cancer patients.

Furthermore, research that has studied the experience of cancer related pain confirmed that pain is a complex and multidimensional aspect that consists of feelings of hopelessness, helplessness, emotional distress, and negative impact on coping mechanism.

Thus, cancer pain is a complex phenomenon that is affected by psychology (depression, anxiety), physical experience, cognitive, behavioral, and socio-cultural aspect (Edrington, Miaskowski, Dodd, Wong, & Padilla, 2007; Wit, Van Dam, Litjens, & Abu Saad, 2001).

Inadequate management of pain is the result of various issues that include: under treatment by clinicians with insufficient knowledge of pain assessment and therapy; inappropriate concerns about opioid side effects and addiction; a tendency to give lower priority to symptom control than to disease management; patients under-reporting of pain and non-compliance with therapy; and impediments to optimum analgesic therapy in the healthcare system (Portenoy & Lesage, 1999). Moreover, cancer related pain depends on the type of cancer, stage of disease, type of treatment received and location of cancer (Laurie, et al. 2012). Thus, pain management is an essential component of comprehensive cancer

care and effective management of cancer related pain requires recognizing syndromes and understanding of pathophysiology.

Therefore, the purpose of this paper is to review and analyze one case reporting inadequate pain management, to understand in-depth the factors that lead to inappropriate pain management.

### Importance of Controlling Pain

Poor management of pain was first documented in the study done by Marks and Sachar in (1973). According to List et al (2004) more than half of all cancer patients reported severe, uncontrollable pain during the course of their disease, and the management of pain is a primary challenge for the cancer patient and the health care provider. Inadequate pain management can lead to adverse physical and psychological patient outcomes for individual patients and their families. Continuous, unrelieved pain activates the pituitary-adrenal axis, which can suppress the immune system and result in postsurgical infection and poor wound healing. Sympathetic activation can have negative effects on the cardiovascular, gastrointestinal, and renal systems, predisposing patients to adverse events such as cardiac ischemia (Gordon, Dahl, Miaskowski, et al. 2005). Moreover, the effect of pain is not localized; it is systemic and has physiological harm affects on most body systems such as endocrine and metabolic system, cardiovascular system, gastrointestinal system, and immune system (Pasero , Paice , &McCaffery, 1999).

### Literature review of pain experience

In order to review the body of knowledge related to pain experience among patients receiving cancer treatment, a comprehensive literature review was conducted using the electronic databases of CINAHL, EBSCO, Medline, and PubMed, for articles published between 2006 and 2012. The following key terms were used to

search the electronic databases: pain experience, cancer pain, pain management, pain symptoms, pathophysiology of pain.

Of the many articles obtained and reviewed, only 14 research articles achieved the inclusion criteria for the purpose of this study. The inclusion criteria were the following: (1) it is a research-based study; (2) written in the English language; (3) investigated the pain experience among patients receiving cancer treatment; and (4) recently published article. Based on the inclusion criteria, a total of 14 articles published from 2006 to 2012 were selected and formed the basis for this review. Each article was read and analyzed, to identify the main themes/findings of the studies. Articles were then systematically compared for common concepts to recognize similarities and differences in scope and findings across the studies. The articles that were included in this study were quantitative and qualitative studies that were published in peer reviewed nursing and medical journals. Countries within which the studies for this review were conducted include the United States, Australia, Japan, China, Israel, Greece, and Jordan.

The 14 studies composing this review were seven quantitative studies and seven qualitative studies. Although only 14 studies were included in this research review, a wide variety of instruments were used to measure concepts related to cancer pain experience. The most common questionnaires used in these studies are the Brief Pain Inventory, semi structured interviews, and BQII. The sample sizes in the 14 studies in this review ranged from 11 to 560 adult cancer patients aged between 18 and 82 years.

### Finding of the literature review

Cancer pain is a multidimensional issue that needs to be managed from a holistic perspective. Fourteen articles were reviewed, taking into consideration the experience of

cancer-related pain from all aspects of pain dimensions. In a study done by Everdingen et al. (2007) to review the prevalence of pain in patients with cancer over the past 40 years, the researcher mentioned that patients suffering from cancer related pain in multi stage of cancer process, (64%) have experienced pain with metastatic terminal disease, and (59% to 73%) during anticancer treatment and (33%) in patients who had been cured of cancer.

In another study done by Vallerand, et al. (2007) that focused on the affective, sensory and cognitive domains in his cross sectional design study that aimed to examine the relationships between pain levels and beliefs about pain; two indicators were used to define the patient's beliefs about pain: knowledge regarding pain and barriers to pain control, symptom distress, perceived control over pain, and functional status in 304 ambulatory cancer patients who experienced cancer-related pain within the past 2 weeks. There were 119 (39%) men and 185 (61%) women. Their age levels ranged from 18 to 86 years. The researcher found that a patient's pain level was positively related to increased distress and decreased perceived pain control and functional status. Structural equation modeling indicated that symptom distress mediated the relation between pain level and functional status. Perceived pain control had a direct effect on symptom distress and mediated the effect of beliefs about pain and pain level on symptom distress. Also, a quantitative descriptive study done by Stark, et al. (2012) discussed the physiological experience of pain. The researchers aimed to describe the symptom experience of patients with cancer pain, the researchers recruited 393 outpatients at a National Cancer Institute, in Florida. The researchers found that pain experience was the most distressing problem. Similarly, in a study done by Cohen, et al. (2005) to describe the cancer pain experience of Americans and Israeli patients aged 65 years and older, the researchers found that the pain is the worst

symptoms in the two groups, and significant relationships were found between worst pain and symptom severity, disease stage, age, and culture.

In order to determine gender differences in cancer pain experience, a cross-sectional study was done by Kim, et al. (2006). A total of 262 participants for the quantitative phase were recruited through the Internet, and 41 participants among them were recruited for the qualitative phase. The researchers reported that there was no significant gender difference in cancer pain experience. The qualitative findings indicated five categories that contrasted women's cancer pain experience from men's cancer pain experience: (a) gender differences in the meanings of cancer pain; (b) gender differences in attitudes toward cancer pain; (c) problems in pain management regardless of gender; (d) controlling cancer pain in women and men; (e) gender differences in pain characteristics. The findings of this research recommend the need to respect women's own perceived needs and attitudes influencing their cancer pain experience. In the literature it has been reported that Asians are hesitant to report psychological pain experience, such as depression, which is considered a stigma in Asian cultures; instead, they report physical experience, even when their symptoms are psychological in nature (Im et al., 2007).

Furthermore, Alexopoulos, et al. (2011) studied the pain experience in advanced cancer patients, to identify characteristics of pain. The researchers recruited 134 cancer patients. The researchers found that the great majority of the patients (72%) with advanced malignancy reported high pain intensity and 66.4% experienced the pain as continuous. Furthermore, Cohen, et al. (2008) explored relationship between oncology patients' beliefs about pain and the treatment they received by using a descriptive survey and

patient outcome questionnaire. The researchers found that more than half of the patients had experienced pain in the previous 24 hours ( $n = 69$ , 54.8%). Of the 69 patients who had experienced pain, 87% ( $n = 60$ ) reported their worst pain to be of moderate to severe intensity. Patients with moderate to severe pain in the previous 24 hours accounted for 47.6% of the total sample. The researchers reported that the patients had experienced moderate to severe pain in the previous 24 hours but had only received 40.4% of available analgesics.

These findings reflect the importance of palliative nurses to give more attention to advanced malignancy patients during assessment and management of pain. Moreover, to study the experience of pain related to cancer treatment, Nomiya, et al. (2010) conducted a prospective quantitative study, and recruited 91 patients, age not more than 67 years, to analyze pain experience before and after radiotherapy. The researchers found that the pain score at the end of radiotherapy was significantly less than that before radiotherapy. These findings may help nurses and other health care providers in considering type and dose of pain medication before and after radiotherapy management.

A study was done by Meghani & Keane (2007) to understand the beliefs about pain medication among African American cancer patients. The researchers used a qualitative descriptive design and recruited 35 patients with solid tumor and used a Brief Pain Inventory tool and semi structured audio taped interview. The majority of patients did not believe in using pain medication; only 11% expressed strong beliefs in analgesics. The researchers also found that the reasons for not believing in analgesics included inadequate relief combined with adverse side effects. These findings may help oncology nurses in considering more strong analgesics and managing their side effects. Similarly, Im and colleagues

(2008) identified the socio-cultural dimension of pain experience in their study.

The researchers found that the participants look for pain as a challenge in life that they should fight against and differentiated it from ordinary pain because cancer was stigmatized in their culture. In addition, patients held varying beliefs about pain and pain treatments in particular; 41% held strong beliefs about the potential for addiction to narcotics. Furthermore, Cohen et al. (2008) reported that patients, who have strong beliefs about the potential for addiction to narcotics, may influence their pain management. Effective pain management in the inpatient oncology setting continues to be an important clinical issue, and patients do not receive all available pain treatment. There may be an important association between patients' beliefs about pain and pain management and the pain management they receive. This concurred with Dunn & Horgas, (2004) who mentioned that some religious beliefs or rituals play a critical role in reporting cancer pain and in choosing coping strategies to relieve pain. More studies are needed to explore the multidimensional model of cancer pain experience and the relationship between pain beliefs, attitudes and various dimensions of pain experience.

## Assessment of Pain

The goal of pain assessment is to identify the pathophysiology of the pain, intensity of the pain and its impact on the patient's ability to function. For example, a study was done by Mystakidou, Tsilika, Parpa, et al. (2006) to evaluate the association between psychological distresses and pain with advanced cancer. Pain intensity and pain that affected walking ability, normal work, and relations with other people, as measured by the Brief Pain Inventory, were found to be significant predictors of anxiety, as measured by the Hospital Anxiety and Depression Scale. Using the



same tools, the authors also found pain that interfered with enjoyment of life was a predictor of depression.

There are many factors that may play an important role in the response to analgesics and result in persistent pain such as changing nociception due to disease progression, intractable side effects, tolerance, neuropathic pain, and opioid metabolites (Mercadante & Portenoy, 2001).

Multiple pain assessment tools exist. Among the more commonly used tools are numeric rating scales, verbal rating scales, visual analog scales, and picture scales, but, still the main step of pain assessment is the patient self-report (Holen, Hjerstad, Loge, et al. 2006). The clinician should listen to the patient's descriptive words about the quality of the pain; these provide clues to its etiology. Moreover, the clinician should ask about the location of pain, radiation, changes in pattern; these may require a new diagnostic reevaluation and modification of the treatment plan. In addition, exploring the cognitive aspect of pain may help in determining the degree of pain experience.

The Brief Pain Inventory (BPI) was developed from the Wisconsin Brief Pain Questionnaire (Daut, Cleeland, and Flanery, 1983). The BPI assesses pain severity and the degree of interference with function, using 0-10 NRS. It can be self-administered, given in a clinical interview, or even administered over the telephone. Most patients can complete the short version of the BPI in 2 or 3 min. Chronic pain usually varies throughout the day and night, and therefore the BPI asks the patient to rate their present pain intensity, pain now, and pain at its worst, least, and average over the last 24 hours. Location of pain on a body chart and characteristics of the pain are documented. The BPI also asks the patient to rate how much pain interferes with seven aspects of life: (1) general activity, (2) walking, (3) normal work, (4) relations with other people, (5) mood, (6) sleep,

and (7) enjoyment of life. The BPI asks the patient to rate the relief they feel from the current pain treatment (Wang & Cleeland, 2008).

### Diagnostic procedure

To understand the cause of cancer pain the patients need to have various laboratory tests, X-rays, computed tomography (CT) scans, magnetic resonance imaging (MRI) scans, Positron emission tomography (PET) scans or biopsies. Sometimes it can take weeks or months before the growth of a tumor shows up in an X-ray, for example, even though a patient has been complaining of pain all along. Every case is different, and depending on the type and stage of cancer, the appropriate diagnostic tests vary. After the pain is diagnosed and treatment initiated, it is essential to follow up specifically if the pain worsens or if there is any new pain. In this case, either the treatment will change and may need reassessment for another cause of the pain. The CT scan produces detailed, cross-sectional images of the body. CT scans are helpful in staging cancer. They help in identifying if cancer metastasizes to other organs. PET scans use glucose (a form of sugar) that contains a radioactive atom. A special camera can detect the radioactivity. Cancer cells absorb a lot of the radioactive sugar because of their high rate of metabolism. PET is useful to look for cancer throughout the body.

### Pain Management Strategies

There are two approaches used in cancer pain management; pharmacological approach and non-pharmacological approach. Prescribed pain medications are categorized as non-opioid, opioid and adjuvant pain medications. Non-opioid medications include acetaminophen and non-steroidal anti-inflammatory (NSAID) medications such as ibuprofen or naproxen sodium and are useful for mild to moderate pain and in conjunction with opioid medications for more intense pain (American Pain Society, 2005).

The mechanism of action for acetaminophen is still unknown, but it is postulated that it has a central nervous system mechanism, because of its pain and fever reducing effects (Schug, 2005). The NSAIDs inhibit cyclooxygenase, an enzyme that catalyzes the production of prostaglandins, which are key instigators of the inflammatory process (American Pain Society, 2005). Because of this mechanism, NSAIDs are especially useful in treating inflammatory pain, as they prevent the very process that causes it (Samad, 2004). Opioid pain medications are the medications most frequently used for moderate to severe pain because of their effectiveness, ease of titration, and favorable risk-to-benefit ratio.

Opioid medications include morphine, hydromorphone, methadone, codeine, oxycodone, hydrocodone, levorphanol, and fentanyl (American Pain Society, 2005). Opioid pain medications may be a combination of narcotic pain medications and acetaminophen or non-steroidal anti-inflammatory medications. Opioid medications act on opioid receptors which are found both peripherally and centrally in nerve tissue, in gastrointestinal, respiratory, and cardiovascular organs, and the bladder (Lipman & Gautier, 1997). One particularly opioid receptor-rich area in the central nervous system is the periaqueductal gray, which is a key area in the modulation or control of pain (Heinricher, 2005). When an opioid binds to the opioid receptor, an excitatory or inhibitory response occurs, which inhibits the transmission of pain impulses in the brain and spinal cord (Sweeney & Bruera, 2003).

The term adjuvant analgesics describe "...a non-opioid medication that has pain relieving effects in certain conditions, but whose primary or initial indication was not for the treatment of pain" (American Pain Society, 2005, p. 73). Medications that have been used as adjuvant pain medications include anticonvulsants and antidepressants (American Pain Society, 2005).

Adjuvant medications diminish pain by altering nerve function. Anticonvulsants, such as phenytoin and carbamazepine work by blocking the sodium channels and stabilizing the nerve membrane (Kalso, 2005). Antidepressants, such as amitriptyline increase the availability of neurotransmitters, block sodium channels, and block receptors (Kalso, 2005). When sodium channels are blocked the nerve depolarization and stimulation will be affected, and nerve hyper-excitability is diminished (Kalso, 2005).

The type of pain medication prescribed (i.e. non-opioid, opioid, adjuvant) is an important indicator of pain management quality as pain management guidelines recommend specific types of medication in response to different reports of pain (American Pain Society, 2005; NCCN, 2006; NCI, 2006). The five essential concepts of the World Health Organization (1996) approach to drug therapy are (1) oral administration, (2) by-the-clock, (3) by the ladder, (4) for the individual, and (5) with attention to detail. The drug is chosen to match the intensity of pain. A validation study of the World Health Organization Analgesic Ladder suggests that a direct move to the third step of the ladder is feasible and could reduce some pain scores but also requires careful management of side effects (Maltoni, et al 2005). Use of this approach enables management of 80% of cancer pain.

Radiation therapy can relieve pain associated with local extensions of cancer, as well as metastases. Pain due to peripheral nerve compression or infiltration by tumor may sometimes be relieved by radiation therapy. Radiation therapy may be simply palliative for relief of bone pain.

### **Non-pharmacological approaches**

Non-pharmacological approaches such as acupuncture, hypnosis, and biofeedback have been used for the relief of cancer pain and are useful in some cases. No adequately

controlled studies have shown their effectiveness in cancer pain, but many ambulatory patients use these methods without the knowledge of their attending physicians. A systematic review of controlled clinical trials reveals that there is insufficient evidence to determine whether acupuncture is effective in treating cancer pain in adults (Paley, et al. 2011).

### **Rehabilitation of the patient with cancer pain**

Adequate pain management is a requisite condition for successful rehabilitation of patients with cancer. Opioid pharmacotherapy, adjuvant drugs, disease-modifying therapies, and interventional strategies may be used concurrently to augment pain relief.

The current management of pain in cancer patients is inadequate and requires further research. Problems with management of cancer pain that need to be addressed include use of inadequate doses of opioids and poor management of opioid side effects (Jacobsen et al 2007). There is also a need to develop better dosing strategies and evidence-based recommendations for severe cancer pain. Currently, opioid dose titration for severe pain is guided by the experience and opinion of an individual expert. Evidence-based guidelines for the use of opioid analgesics in the treatment of cancer pain are being developed in Europe (Pigni, et al. 2010). Evidence-based standards for cancer pain management have been described (Dy, et al. 2008). According to the recommendations, when spinal cord compression is suspected, providers should treat with corticosteroids and evaluate with whole-spine magnetic resonance imaging scan as soon as possible but within 24 hours, to make further decisions for definitive treatment. With increasing length of survival of cancer patients, cancer pain is moving into the category of chronic pain and provides more challenges in management (Burton, et al. 2007). Although opioids are capable of controlling moderate and severe cancer pain, their

adverse effects remain a cause for concern. Efforts to address this problem include the following (Plante & VanItallie, 2010). Neuro-stimulatory or neuro-inhibitive methods are being investigated to reduce the dose by amplifying the analgesic action of opioids. The search continues for endogenous opioids that are as effective as currently available opioids but without their adverse effects. Advances during the past decade suggest a future trend towards a targeted as well as an individualized plan of management of cancer pain that is appropriate throughout the course of illness (Portenoy et al., 1999).

## **Case study**

### **Patient history**

Mrs. H is a 52-year-old female with fourth stage of cervical uterus cancer that had metastasized to right lung, bone, adrenal gland, and spinal cord, and was admitted to King Hussein Cancer Center (KHCC) on December, 4, 2012 via the emergency department. The chief complaint was generalized severe pain as a result of her disease process associated with nausea, vomiting and constipation. On admission, she was conscious, oriented to time, place, and person, looked unwell, in distress, crying, and agitated, and of pale color. Hemodynamic status was stable, blood pressure 100/60, heart rate 98, respiratory rate 18 in shallow breathing, and a febrile temperature 37.4c°. Mrs. H has a history of hypertension, no diabetics, and has frequent multiple admission for her pain; the last admission was two months ago.

### **Case description**

The numeric Scale scoring system was used to measure the patient's pain. It was assessed at 10 out of 10. The patient also described her pain as intolerable, all over her body, not relieved by prescribed oral pain killer such as tramadol 50mg orally, three times PRN and Plasil 10mg orally, three times. Pain increased at night which disturbed her sleeping. Despite this the patient was compliant to her prescribed medicine

and was using oral opioids drugs. Mrs. H was still suffering from severe pain and the pain had increased in the last two weeks. Also, her pain affected her social interaction with family members and friends.

### Treatment plan

Firstly, the patient was reassessed for her pain post receiving a dose of 10mg of IV morphine in the emergency department; the patient was still in pain and she verbalized that her pain still eight out of ten in the numeric scale. Also, the patient was still in distress, anxious, and her vital signs were stable. Another Morphine 10mg IV diluted in 10 ml saline was given slowly; Hydromorphone was administered through a patient-controlled analgesia pump for 24 hours only and dose titrated to pain, and received Paracetamol (perfulgan) one gm IV q 8hrs, Ibuprofen 400mg orally, three times, Plasil 10mg IV every eight hours, Halidol 0.5 mg IV every six hours, and Midozolam 0.3mg IV every six hours.

### Outcome

The patients' pain was decreased, pain score became four out of ten after the above treatments for pain were given; the prescribed drug formula was success in alleviating the patient's pain. Halving her pain intensity was sufficient to permit the patient to begin enjoying family interaction again. With no more nausea and vomiting, a patient tends to sleep, with no more agitation.

### Discussion

According to Vignaroli et al. (2012) an effective cancer pain management must consider the half-life, bioavailability and the duration of action of the different drugs; thus, analgesics for chronic pain should be prescribed on a regular basis and not on an as needed basis as had been prescribed for Mrs. H. in this case study. Mrs. H. was complaining of severe episodes of pain at home, and she was complaining of nausea and vomiting despite taking her oral morphine.

According to WHO, (2002) and Ripamonti & Bandieri, (2009) the dose of the analgesic drugs is influenced by the intensity of pain and has to be adjusted to reach pain relief and the health care providers should consider an alternative route for opioid administration when the oral administration is not possible because of severe vomiting, bowel obstruction, severe dysphagia, or severe confusion as well as in the presence of poor pain control. Thus, Mrs. H. needs a thorough assessment of her pain and a change in therapeutic regimen.

Opioids are classified according to their ability to control the mild to moderate pain (codeine, dihydrocodeine, tramadol; second step of the WHO analgesic ladder) and to control the moderate to severe pain (morphine, methadone, oxycodone, hydromorphone, fentanyl, heroin, and oxymorphone; third step of the WHO analgesic ladder) (WHO, 1996; Ripamonti, Bandieri, Roila, 2011; Paice & Ferrell, 2011). Moreover, opioid analgesics can be combined with non-opioid drugs such as paracetamol or with non-steroidal anti-inflammatory drugs (NSAIDs) and with adjuvant drugs (McNicol, Strassels, Gouds, et al, 2006). Paracetamol and NSAIDs are universally accepted as part of the treatment of cancer pain at any stage of the WHO analgesic ladder at least in the short-term unless contraindicated. Thus, Mrs. H. as she complains of severe pain needs to have non-opioid drugs combined with opioid drugs. In a systematic review of randomized controlled trials on analgesia obtained from single oral doses of Paracetamol alone and in combination with codeine in post-operative pain, the researchers found that 60 mg codeine added to paracetamol produced additional pain relief even in single oral doses (Moore, Collins, Carroll, et al. 1997).

It is clinically suggested that the best approach is to tailor the dosage of the opioid to the needs of the individual patients, starting treatment with oral normal release morphine (NRM) because its dosage can be

modified very quickly (also every hour) according to the patient's needs. This strategy may be used to titrate and re-titrate the opioid dosage to achieve pain relief individually even on a day-by-day basis. Once an effective morphine dosage is achieved by using NRM, one may switch to a sustained-release oral preparation or to a transdermal opioid (De Conno, et al. 2008).

Recently, systematic reviews of other strong opioids such as hydromorphone and oxycodone were published. Both drugs are analogues of morphine with similar pharmacodynamic properties and can be considered as an alternative to morphine in the treatment of moderate to severe cancer pain (Pigni et al., 2011). Although the oral route of opioid administration is effective in most situations, intravenous, subcutaneous, rectal, transdermal, sublingual, intranasal, and spinal administration must be considered in severe uncontrolled pain (Pigni et al., 2011). In addition, Fentanyl citrate has a very high analgesic potency (?75 times more than morphine), is skin compatible having a low-molecular weight with good solubility and thus suitable for transdermal administration. Transdermal fentanyl offers the advantage of providing up to 3 days continuous administration of a potent opioid. There is some clinical and preclinical evidence showing that transdermal fentanyl produces less constipation when compared with morphine and other strong opioids (Cachia&Ahmedzai, 2011).

Mrs. H. was treated with oral morphine and with analgesic side effects and pain was not adequately controlled. According to the data of the literature, different therapeutic strategies may prevent or treat adverse effects such as hydration, administration of antiemetic, laxative and administration of an alternative opioid such as hydromorphone and fentanyl (Cherny, Ripamonti, Pereira, et al. 2001).

To manage the acute phase of pain for Mrs. H. and to provide continuous



pain relief, a subcutaneous infusion of morphine and midazolam was initiated. The pain team continued to observe and assess her response; the patient's pain was relieved and she felt comfortable. Furthermore, the care team identified several non-pharmacological strategies to address Mrs. H.'s pain including distraction, use of heat and cold, massage, and relaxation technique. Patient's pain and general condition were discussed with her daughter and parents. Frequent visiting times were advised and social interactions with peers were encouraged. In general, the care team needs to be more aware of the need for a holistic approach to pain assessment and management. Moreover, the care team carried out a thorough pain assessment including description of pain sites, type of pain being experienced and during the pain episodes the time and duration, and possible triggers of pain were assessed. Mrs. H.'s pain level slightly improved, but she continued to experience severe breakthrough pain every few hours.

It has been reported that early psychological intervention enables exploration of the issues that may exacerbate pain and help to manage anxiety related pain (Middleton-Green, 2008). Mrs. H. stated clearly, despite the effect of sedation on her inability to think clearly and impaired her social environment, she wanted pain relief including sedation. Thus the care team may need to consider alternative solutions to achieve the sense of control, for example adding patient controlled analgesia infusion when discharged home. Moreover, a need to address her social and emotional needs and a referral to hospice care in order to coordinate the patient's care and promote her quality of life.

## Conclusion

This paper examined Mrs. H.'s pain management strategy during her admission to KHCC. The paper focused on the comprehensive assessment of Mrs. H., cancer pain and a pain management strategy was used compared with

an international pain management guidelines and recent based evidence practice toward pain management. Also, it discussed the challenges that were faced in achieving pain control and the appropriate pharmacological and non-pharmacological approaches for Mrs. H.'s issues. Physical pain is only one potential cause of suffering; thus, successful pain control requires attention to some or all of the other aspects of care and suffering, and this requires a multidisciplinary approach to treatment; failure to do this frequently results in unrelieved pain. Successful pain management requires treatment of the patient's total pain: physical, psychological, social, spiritual, and cultural aspects of pain. However, the total approach used in managing Mrs. H.'s pain was acceptable; pain was relieved and referral to hospice care was initiated.

## References

1. Alexopoulos E.C., Koutsogiannou P., Moratis E., Mestousi, A., & Jelastopulu E. (2011). Pain in cancer patients: The Greek experience. *European Journal of Oncology Nursing*, 15, 442-446.
2. American Pain Society (2005). Quality improvement guidelines for the treatment of acute and cancer pain. *JAMA*, 247:1874-1880
3. Cachia E., Ahmedzai S. (2011). Transdermal opioids for cancer pain. *Curr Opin Support Palliat Care*, 5, 15-19.
4. Cherny N., Ripamonti C., Pereira J., Davis C., Fallon M., McQuay H., et al. (2001). Strategies to manage the adverse effects of oral morphine: An evidence-based report. *Journal of Clinical Oncology*, 19(9), 2542-2554.
5. Cohen E., Botti M., Hanna B., Leach S., Boyd S., and Robbins J. (2008). Pain beliefs and pain management of oncology patients. *Cancer Nursing*, 31, (2), s28-s31.
6. Cohen M.Z., Musgrave C.F., Munsell M.F., Mendoza T.R., & Gips, M. (2005). The Cancer pain experience of Israeli and American patients 65 years and older. *Journal of Pain and Symptom Management*, 30, (3).
7. De Conno F., Ripamonti C., Fagnoni E., et al. (2008). The MERITO Study: a multicentre trial of the analgesic effect and tolerability of normal-release oral morphine during 'titration phase' in patients with cancer pain. *Palliat Med*, 22: 214-221
8. Edrington J., Miaskowski C., Dodd M., Wong C., & Padilla G. (2007). A Review of the Literature: pain experience of Chinese patients with cancer. *Cancer Nursing*, 30,(5).
9. Everdingen M., Rijke J., Kessels A., Schouten H., 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.
10. Gordon D., Dahl J., Miaskowski C., et al. (2005). American pain society recommendations for improving the quality of acute and cancer pain management. *Arch Intern Med*. 165:1574-1580.
11. Im, E., (2007). Ethnic differences in cancer pain experience. *Nursing Research Journal*, 56 (5), 296-306.
12. Im E., Clark M., and Chee W. (2008). African American cancer patients' pain experience. *Cancer Nursing*, 31, (1).
13. Kim Y.H., Shin H., Kim K.S., Che W., & Im E.O. (2006). Gender differences in pain experience among Caucasian and Asian cancer patients. *Oncology Nursing*, 33(2), 461.
14. Laurie L. S., Tofthagen C., Visovsky C., & McMillan S.C. (2012). The Symptom experience of patients with cancer. *Journal of Hospice & Palliative Nursing*, 14,(1), 61-70
15. List M., Rutherford J., Stracks J., Pauloski B., Logemann J., Lundy D., et al. (2004). Prioritizing treatment outcomes: Head and neck cancer patients versus non-patients. *Journal of Science and Specialist of the Head and Neck*, 26, (2), 163-170. .
16. Marks, R., & Sachar, E. (1973). Undertreatment of medical in-patients with narcotic analgesics. *Ann Intern Med*, 78, 173-81.
17. McNicol E., Strassels S., Gouds L., et al. (2006). NSAIDs or paracetamol, alone or combined with opioids, for cancer pain (Cochrane

Review). In the Cochrane Library Issue 1, Chichester: John Wiley.

18. Meghani H., & Keane A. (2007). Preference for analgesic treatment for cancer pain among African Americans. *Journal of Pain and Symptom Management*, 34, (2).

19. Nomiya T., Teruyama K., Wada H., & Nemoto K. (2010). Time course of pain relief in patients treated with radiotherapy for cancer pain. *Clinical Journal of Pain*, 26, (1).

20. Paice J. & Ferrell B. (2011). The management of cancer pain. *CA Cancer J Clin*, 61, 157- 182

21. Pasero C., Paice J., McCaffery M. (1999). Basic mechanisms underlying the causes and effects of pain. *Pain: clinical manual*. 2nd ed. St. Louis, MO: Mosby; p. 15-34.

22. Pigni A., Brunelli C., Caraceni A. (2011). The role of hydromorphone in cancer pain treatment: a systematic review. *PalliatMed*, 25(5): 471-477

23. Portenoy H & Lesage M. (1999). Management of cancer pain. *Pubmed*; Vol353(9165):1695-700.

24. Ripamonti C., Bandieri E., Roila F. (2011). On behalf of the ESMO Guidelines Working Group. Management of cancer pain: ESMO Clinical Practice Guidelines. *Ann Oncol*, 22(Suppl 6): 69-77.

25. Ripamonti C., & Mercadante S. (2004). How to use octreotide for malignant bowel obstruction. *Journal of Supportive Oncology*, 2 (4), 357-364.

26. Ripamonti C., Bandieri E. (2009). Cancer pain. *Crit Rev OncolHematol*, 70:145-149.

27. Stark L.L., Visovsky C., Susan C. McMillan S.C. (2012). The Symptom experience of patients with cancer. *Journal of Hospice & Palliative Nursing*, 14 (1) 61-70.

28. Vallerand A., Templin T., Hasenau S., Riley-Doucet C. (2007). Factors that affect functional status in patients with cancer-related pain. *Journal of Pain*, 132, 82-90

29. Vignaroli E., Bennett,M., Nikolaichuk C., et al. (2012). Strategic pain management: the identification and development of the International Association for Hospice and Palliative Care (IAHPC) Opioid

Essential prescription package. *J Palliative Med*, 15(2): 186-191.

30. Winslow M., Seymour J., and Clark D. (2005). Stories of cancer pain: A Historical perspective. *Journal of Pain and Symptom Management*, Vol. 29, (1)

31. Wit R., Van Dam, F., Litjens J., and Abu-Saad H. (2001). Assessment of pain cognitions in cancer patients with chronic pain. *Journal of Pain and Symptom Management*, Vol. 22, (5)

32. World Health Organization. (1996). *Cancer Pain Relief*, 2nd edition. Geneva.

## WHAT IS THE PURPOSE OF COMMUNITY MEETING IN AN INPATIENTS PSYCHIATRIC UNIT?

**Ala'a Alnasser**

### Correspondence:

**Ala'a Alnasser**

**Email:** to\_alaa84@yahoo.com

### Introduction

Recent attention has been developed for the provision of inpatients mental health care (Harms, Benson, 2003). Large group meetings of patients and health team widespread in the majority of Mental hospitals, which often called "community are meetings" ( Lipgar, 1999). The community meeting occurs in inpatients setting as a part of the therapeutic action delivered to clients (Harms, Benson, 2003).

Community meeting is a part of milieu program (Kisch, Kroll, Gross; & Carey, 1981); it is a regular meeting in an inpatient unit for all staff and patients on the unit. The duration ranges from 45 to 60 minutes, and it can be held once daily to once weekly (Novakovic, Francis, Clark, & Caring, 2010). The members of the meeting includes nurses, social workers, occupational therapists and psychiatrists (Fiddler et al, 2010).

The meeting is derived from work done in England during World War II by Maxwell Jones (1965), Wilfred Bion (1959), and S.H. Foulkes (1990). At that time, a large number of patients needed care for the treatment of mental illnesses. The treatment are primarily guided by psychoanalytic theory and clinical experience. The use of community meeting is classified as " milieu therapy" ( Lipgar, 1999).

### Clinical Question

Lipgar (1999) points out that although there is a long history of use of community meetings as an

essential part of the united treatment programme, their purpose and methods are rarely defined and staff are seldom trained in how to contribute to these meetings. The purpose of the psychiatric inpatient unit community meeting is often unclear to the staff and patients (Kisch, Kroll, Gross; & Carey, 1981). The frequent complaint from clients is that the community meetings are useless (Novakovic, Francis, Clark, & Caring, 2010).

The aim of this paper is to address the question - what is the purpose of the community meeting in an inpatients psychiatric inpatients unit and to search the literature for evidence to answer this question.

### Searching strategies

An electronic search of databases was conducted through academic search engines: EBSCO, CINAHL, MEDLINE. The reference lists of included studies and reviews were searched for additional studies.

Two search sets were used, one related to community meeting and used the terms "inpatients community meeting" or "large group meeting" or "Ward meeting" or "patients-staff community meeting" . The second search set related to conditions and used the terms " psychiatric unit" or "mentally ill " The two search sets were linked with the instruction 'AND'. A wildcard asterisk was applied to search for related terms. A number of limiters were used such as English language, content type (journal), no specific dates were chosen.

This search yielded 155 references, of which 85 were in the English language and had abstracts. Most of the studies are excluded for not being free access or as not being related to the topic.

### Literature review

After an extensive search about the purpose of psychiatric inpatients community meetings most of the studies found were qualitative studies that highlight the living experience of a community meeting, so outdated papers which considered the original and classical papers where the authors addressed the purposes of community meeting in an inpatients psychiatric unit, were used so as to present a models to conduct these meetings.

Winer, Klamen (1997) presented a large group interpretive model for the community meeting in psychiatric inpatients setting which focuses on studying the relationship between the staff and clients, and to focus on the maladaptive ways that the clients interpret the staff behaviors. The authors state that the purpose of the community meetings is to reveal the attitudes that clients have towards the staff and what is the meaning of these attitudes. It present a form of quality control for staff and the clients to discuss hidden subjects from both staff and clients perspectives, and another purpose to address in the model is to take feedback from the clients about staff behaviors; so as to give psychodynamic understanding to the clients about pharmacological intervention to increase clients compliance to medication. Finally community meetings can decrease the tension on psychiatric units as the authors stated.

Another interesting paper done in 2010 by Novakovic, Francis, Clark, & Caring discuss the issue of whether the community meeting is a therapeutic intervention or a



meaningless exercise? This paper presented the findings of group discussion from the point of view from the patients and the staff as a literature search. The results explain many dimensions of the benefits of community meetings. Firstly, it benefits patients by 1) a space and time to address and solve problems, 2) a safe space to be seen and heard by peers, 3) a space to address issues about relationships between staff and patients, 4) provide connection and intimacy as a group. Secondly, development of the therapeutic relationship between patients and staff. Thirdly, improvement of the milieu therapy and finally increases the relationships with colleagues and other professionals.

A qualitative study highlights the experience of once a week traditional ward round and the experience of daily inpatients meeting. The authors used interview technique to collect data from 21 purposive samples for a 4 week period, and the sample consists of seven nurses, one social worker, two occupational therapists, three psychiatrists and eight managers. This study reveals the following according to community meeting and its aim to 1) provide short, efficient timetabled sessions, 2) better access to multidisciplinary team to discuss the patient decisions. In comparison to weekly ward rounds it results in an increased contribution of patients in the services which can improve the patient's satisfaction (Fiddler et al, 2010).

Another qualitative research article was done by Benson, Harms (2003). This study builds up an understanding of the client's experience according to daily community meetings.

Semi-structured interviews were conducted with a sample of four patients for three to six weeks. Data were collected by tape recording, and transcribed. Most of the staff were mental health nurses. The study reveals three themes: Whose Responsibility? Me vs. Them, What

Works? In the concern of the aim of community meeting the authors stated that it was developed to examine the relationship between the clients and others so as to discover new ways of adjusting stressors and promoting self esteem.

One of the purposes of the community meeting is to reduce violence against nurses (Lanza, Rierdan, Forester, Zeiss, 2009). An experimental study was conducted by applying Violence Prevention Community Meeting (VPCM) to two groups of inpatients with psychiatric disease, twice weekly for thirty minutes. The focus of the meeting was on violence prevention and empathic listening so the patients and staff can work together.

## Discussion

To make useful community meetings and to enhance participation from the staff and the patients, the distinctive purposes of the meeting must be discussed and approved by evidence, to address the appropriate way to administer this meeting (Lipgar, 1999).

Searching the literature for evidence of the community meeting purposes as discussed in the literature review section, reveals that all the studies and papers agreed that community meetings will be of benefit to the patients as well as the staff (Winer, Klamen, 1997; Novakovic, Francis, Clark, & Caring, 2010; Fiddler et al, 2010; Benson, Harms, 2003; Lanza, Rierdan, Forester, Zeiss, 2009).

## Benefits to the clients

According to the psychiatric inpatients units, the community meeting appears to give psychodynamic understanding to the clients about pharmacologic intervention to increase clients compliance to medication (Winer, Klamen, 1997). Novakovic, Francis, Clark, & Caring (2010) stated that community meeting can benefit patients by 1) a space and time to address and solve problems, 2) a safe space to be seen and heard by

peers, 3) a space to address issues about relationships between staff and patients, 4) provide connection and intimacy as a group. Community meeting can improve the patient's satisfaction (Fiddler et al, 2010), by discovering new ways of adjusting stressors and promoting self esteem (Benson, Harms, 2003).

## Benefits to the staff

Lanza, Rierdan, Forester, Zeiss (2009) believed that community meetings can reduce violence towards nursing staff. It reveals the attitudes that clients have towards the staff and what is the meaning of these attitudes. It takes feedback from the clients about staff behaviors (Novakovic, Francis, Clark, & Caring, 2010). It also increases the relationships with colleagues and other professionals and provides better access for multidisciplinary team to discuss the patient decisions. (Novakovic, Francis, Clark, & Caring, 2010; Fiddler et al, 2010).

## Recommendation

Evidence from the articles suggests that community meetings are as useful to the patients as the staff as apart of the treatment programme in an inpatients psychiatric unit. So we recommend applying community meeting with inpatients in psychiatric units.

In conclusion, this recommendation was based on a process that begins with asking a clinical question "what is the purpose of conducting a community meeting in an inpatients psychiatric unit?", then collecting the most relevant and best evidence from literature we used data bases CINAHL, Science Direct, and Medline, and five relevant studies which consisted of two papers (Winer, Klamen., 1997; Novakovic, Francis, Clark, & Caring., 2010), and two qualitative studies ((Fiddler et al., 2010; Benson, Harms., 2003) and one quantitative study (Lanza, Rierdan, Forester, Zeiss, 2009) were selected then we critically appraised the evidence and integrated the articles to formulate new evidence.

This is level B evidence as it is consistent and highly recommended evidence but it is not based on strong design studies, so further randomized controlled trials are needed to support this evidence.

Maybe these studies are not adequate to apply this intervention in the Jordanian inpatients in psychiatric unit but this give us a pathway to work on and a new research question to study. Although the studies are not strong in design they clearly reveal the living experience of community meetings from patient and staff points of view.

Community meeting is a simple and highly effective intervention that can be done by nurses, however to have adequate knowledge some training session may be needed as they must take into consideration the multidisciplinary team working in the community meeting in the psychiatric inpatients unit. However special consideration must be taken into account when applying community meetings to manage the focus of the education and make a policy to apply this intervention.

### Special Consideration

To achieve the goals of the community meeting there are some recommendations for the implications for community meetings; these recommendations are according to Novakovic, Francis, Clark, & Caring (2010) include the following:

- The room chosen for the meeting should provide a safe space and the seating preparations should be made to include all participants.
- All staff and clients on the ward should be empowered to be present at and participate where possible.
- Community meetings should be conducted at a regular time. The duration of the meeting should be specified.
- Community meetings should be facilitated by at least two identified

staff from the multidisciplinary team in order to provide stability.

- The rules and aim should briefly be presented at the start of each meeting. The role of the staff and the clients should be defined at the beginning of the meeting and an agenda could be written on a board for all to see.
- Community meetings should provide an opportunity for the clients to think about subjects connected to the experience of living on the unit, issues around discharge, and practical issues such as hygiene, sleep regime, smoking regulations.
- Management should consider the reorganisation of ward activities in order to enable improved capacity for multidisciplinary working and for all professionals to take part in these meetings, as well as any other designated group work or activities provision.
- Ongoing development and training for staff is to be encouraged, if clinical practice and understanding is to be improved.
- All attending the community meeting should have an opportunity to engage in the group discussion. The staff's role is to help all to express their views by encouraging and inviting them into the subject discussed.
- Organisational support is needed for provision of a work discussion group for leader and the ward staff team.

### References

- Fiddler M., Borglin G., Galloway A., Jackson C., McGowan L., & Lovell, K. (2010). Once a week psychiatric ward or daily in patients team meeting? A multidisciplinary mental health team's experience of new ways of working. *International Journal of Mental Health Nursing*, 19, 119-127.
- Harms S., & Benson A. (2003). The clients experience of the community group: implication for nurse facilitators. *Journal of Psychiatric and mental health Nursing*, 10, 49-56.

Kisch J. Kroll J. Gross R., & Carey K. (1981) In-patient community meetings: problems and purposes. *British Journal of Medical Psychology*, 54, 35-40.

Lanza M. L., Rierdan J., Forester L., Zeiess R. A. (2009). Reducing violence against nurses: the violence prevention community meeting. *Issues in Mental Health Nursing*. 30, 745-750.

Lipgar, R. M. (1999) Guide to patient-staff large group meetings: a sociotherapeutic approach. *Group Dynamics* 3(1) 51-60.

Novakovic A., Francis K., Clark J., & Caring L. (2010). Community meeting on acute psychiatric wards: a therapeutic intervention or a meaningless exercise? *Mental Health Review Journal*. 15(3), 45-53.

Winer, J. A., Klamen, D. L. (1997). Interpretive psychotherapy in the inpatient community meeting on a short term unit. *Psychiatric services*. 48, 91-92.

# POLICY ANALYSIS PAPER: PROTECT PUBLIC HEALTH FROM SMOKING DANGERS POLICY

Jawad Obaidi

## Correspondence:

Jawad Obaidi MSN,RN

Email: jobaidi@yahoo.com

## Introduction

As in other world countries, Tobacco smoking continues to be the leading cause of preventable death in Jordan (WHO, 2011). Jordan has a series of smoking control policies that have been established since 1971. However, apparently there are many factors that prevent the actual implementation of smoking control policies in Jordan. Thus, the purpose of this paper is to review the smoking control policies applied in Jordan, to demonstrate the efforts that have been spent at the national and international level to enforce these policies; to discuss the major factors that prevents the actual implementation of the smoking control policies; to assess and analyze and protect public health from smoking dangers policy in Jordan in regard to administrative ease, cost and benefit, effectiveness, equity, legality and political acceptability. In addition, to find out recommended alternatives for the policy weaknesses, finally, to propose solutions that may enforce smoking control policies to protect Jordanian health from the risk of tobacco smoking.

## Tobacco smoking in the world

Tobacco smoking is still the leading cause of preventable death across the world (WHO, 2011). Each cigarette contains more than 4,000 different toxic chemicals which can damage the human body (WHO, 2011). Thus, tobacco smoking causes approximately 25 different kinds of diseases that may affect the heart, the lung, the brain as well other body organs (WHO, 2011). For example, cigarette smoking is a major risk factor for many fatal

diseases such as coronary heart diseases, cerebral vascular accident, lung cancer, and chronic obstructive pulmonary disease (WHO, 2011).

Nearly more than one billion of the world's population is currently smokers; 80% of them live in low and middle income countries (WHO, 2011). Every year, approximately 6 million people die from diseases directly related to tobacco smoking of which more than 60,000 are people exposed to second hand smoke (WHO, 2011). More millions of people are affected by the non-fatal health consequences of tobacco smoking (WHO, 2011). Deaths from tobacco smoking are estimated to rise to more than 8 million per year by 2030; 80% of those deaths will occur in the developing countries (WHO, 2011).

## Tobacco smoking in Jordan

Jordan is a developing country with a population of 6.35 million (Census Bureau of Jordan, 2012). Tobacco smoking in Jordan has become a growing national problem (Ma'ayeh, 2003). For example, in 2007 the statistics indicate that tobacco smoking is a very common habit among Jordanian adults. The prevalence of current smokers was 28% of the total population; approximately 50% of men report smoking compared with 5% of women (Belbeisi, Al Nsour, Batieha, Brown, & Walke, 2009). The statistics show that men aged 25-35 had the highest prevalence of tobacco smoking (63%). However, women aged 18-28 had the lowest prevalence of tobacco smoking (<1%) (Belbeisi et al, 2009). The

prevalence of women smoking is relatively small and may be because women smoking is still a stigma in Jordanian culture.

## Problem

Tobacco smoking is also a serious problem among Jordanian youths. The percentage of tobacco smoking among youths was 18% in 1999, 13% in 2004, and 16% in 2007, respectively (as cited by Belbeisi et al, 2009). Young males have greater prevalence of smoking compared with young females. For instance, nearly 20% of young males reported smoking compared with 7-10% of young females. However, nearly 35% of young males reported current use of another form of tobacco smoking such as Argela (water seal smoking tool) compared with 17% of young females (Belbeisi et al, 2009). High prevalence of Argela smoking among youths exists because many of them believe that Argela smoking does not have the same addiction and toxicity affects as tobacco smoking.

There is evidence that the smoking-related diseases have increasingly affected Jordanians' health. For example, during 2009, chronic diseases were responsible for more than 50% of deaths in Jordan (Jordan Ministry of Health, 2009). Death from stroke and heart diseases accounted for nearly 35% of all deaths. Malignant neoplasms accounted for nearly 13% of deaths, with lung cancer being the first cause of cancer deaths (Jordan Ministry of Health, 2009). With 223 lung cancer cases, 185 patients were smokers (Jordan Ministry of Health, 2009). Thus, any effort to prevent tobacco smoking will reduce the prevalence of the most chronic diseases that strike Jordanian health.

Besides the health burden of smoking in Jordan, Jordan spends approximately 500 million Jordanian



dinars annually on tobacco products (Experts Tackle Religious, 2002). Statistics show that spending on tobacco smoking in Jordan rose from 352.3 million Jordanian Dinar (JD) in 2008 to 480 million in 2010 (Experts Tackle Religious, 2002). According to the Ministry of Health the indirect cost of tobacco smoking, in terms of health care for tobacco-related diseases, today stands at 500 million JD. (Note that 1 Jordanian dinars equals 1.42 US dollars).

Overall, two major tangible problems regarding tobacco smoking were found in Jordan. First, tobacco smoking is accessible to everybody. For example, cigarettes are available at an affordable price (around 2 dollars for a packet); most markets buy cigarettes as primary goods. The second problem is that tobacco smoking is a very common phenomenon in public places. People in Jordan smoke almost everywhere without regard to the warning signs. Thus, it is urgent to revise the current smoking control policies in Jordan and to investigate why the current health policies don't prevent the spread of tobacco smoking.

### MOH Protect Public Health from Smoking Dangerous Policy Description

#### Rule 52 -

The words and phrases following wherever used in this chapter shall have the meanings assigned to them below unless the context indicates otherwise:

**Tobacco products:** products that consist, in whole or in part, of the leaf tobacco as raw material which are manufactured for use.

Whether smoking or absorbed sucking, chewing or inhaled.

**Location:** hospitals, health centers, schools, cinemas, theaters, public libraries and museums, and government buildings, public and non-governmental media passenger arrivals and departure lounges

at airports, and indoor stadiums, lecture halls and any other place the Minister decides to consider a public place to publish its decision in the Official Gazette.

#### Rule 53 -

**A** - prohibits any smoking of tobacco products in public places; it may be a decision of the Minister upon the recommendation of the Director health competent locates particular where smoking is permitted in the public place subject to public health and safety, the announcement of this place clearly in a prominent place and in Arabic.

**B** - Notwithstanding the provisions of paragraph (a) of this Rule, prohibits smoking in nurseries and kindergartens in the public and private sectors, and holds the relevant departments in collaboration with the ministry to set rules to implement the ban.

**C** - is committed to being responsible for the development of public space for the panel clearly marked with the words (no smoking) and the reference function in prominent places, and make the necessary arrangements to monitor compliance.

#### Rule 54 -

No person may or public or private entity, including the print media, display or publish an announcement for the purposes of any advertising of tobacco products or distribution of any publication or tools or materials to publicize or advertise its products.

#### Rule 55 -

Prohibits any person from the following:

**A** - the sale of tobacco products to those under the age of eighteen years.

**B** - retail sale of cigarettes.

**C** - making, importing, distributing or selling sympathomimetic tobacco products, including candy, cakes, games and tools manufacturer resembling any of tobacco products.

**D** - machines to sell tobacco products.

**E** - view any of the tobacco products except in accordance with a regulation issued for this purpose.

#### Rule 56 -

Each of producing or importing or marketed within the territory of the Kingdom regardless of tobacco products to put in a conspicuous place on the cans or packages or containers which they marketed tobacco products, shape or phrase or both determined by the specification Jordanian standard or by a decision issued by the Minister for this purpose.

### Policy Evaluation

Clear policy goals written simply for readers of all educational levels, were selected for public places in schools and universities, classrooms and enclosed halls, hospitals and public health centers and private facilities.

The types of smoking policy and tactics include full cigar, Argela and even gum method.

Having identified special places; the minister decided to leave more room to expand the smoking ban for selected ages, who may buy cigarettes; the legal age is 18 years old and above and prevents selling or work in the area of smoking and prevents advertisements or ads that contribute to the dissemination of smoking and compels public institutions and relating to the Status of ads ban smoking.

Prevent the importation of any products which resemble any means of smoking and prevent retailing so as not to be within the reach of children and prevent cigarette vending machines.

Phrases should be placed and developed by the Jordan Institution for Standards and Metrology on anything imported or manufactured in Jordan outlining smoking is harmful to health and a picture of lung cancer.

Responsibilities were identified in the policy that any manager or officer of a public or private institution is an advocate of law enforcement within the foundation of all types and to place advertisements to prevent smoking and applied to employees and beneficiaries of the service within the institution.

The application of this policy has faced resistance from the owners of the restaurants and the coffee shops in Amman, Irbid, as well other Jordanian cities because Argela smoking is considered a basic service that is provided in these kinds of places in Jordan.

In June 2009, the law banning smoking in public places was expanded to involve banning smoking inside fast-food cafeterias; penalties were established in this section in a more formative way compared with the previous legislations. Besides that, the updated legislation provided clear mechanisms for supervision and monitoring of the smoking ban law.

### Strengths

The policy is very important, because smoking has many harms on human health and it is an important step to reduce the diseases that may be caused by smoking, for the benefit of the citizens, and it even helps to avoid serious diseases such as lung cancer, Asthma, COPD, and heart disease. And it is devoted to preventing it in crowded and closed places, which is generally considered wherever humans are as visitors, employers, and customers.

Identified preventive measures to prevent ads and anything that could lead to the spread of smoking were posters to ban smoking in any enclosed or crowded space, prevent sale of all kinds of smoke for children below the age of eighteen which is the legal age and placing of sanctions on violating this policy.

Hired staff supervise this policy by doing the rounds of cafes and

public places. The Ministry of Health employed 180 smoking ban officers to supervise restaurants, coffee shops, and any other shops that violate smoking in public places laws. For example, in March 2012, 12 penalties and 15 warnings were issued to many restaurants and coffee shops in Amman within two months. Besides that, smoking was prohibited among the staff of health care facilities. Ministry staff who smoked in health facilities were penalized through reductions in wages. At the international airport, where smoking is now prohibited with the exception of designated smoking areas, local officers for monitoring adherence were also assigned.

### Weaknesses

Although there are well regulated smoking control policies in Jordan, as well as, the other national and international efforts that have been spent to enforce these policies, there are many still challenges that may prevent the actual implementation of these policies in Jordan.

The first challenge is that the tobacco companies with their strong financial and political influence are still running inside Jordan. And because planting tobacco is banned inside Jordan the tobacco companies import tobacco from outside the country. There are four tobacco industries still active in Jordan beside the cigarettes that are imported from other countries.

Another barrier is the widespread tobacco marketing. Annually, tobacco companies spend millions of dollars to market the tobacco attractively. Through offering of cash prizes and a variety of gifts such as T-shirts, sport bags, and watches. Many markets and malls still place tobacco posters in front of their shops and because the fine imposed is relatively low and not strictly imposed. While advertising of tobacco smoking is forbidden in national TV and Radio Broadcasts by the Jordanian government, the government still has limited control over the cross-border advertisement

on the Internet and other Arab satellite stations.

Another challenge is the lax enforcement of anti-smoking regulation. According to the public health law people who violate the public smoking law are subjected to fines between 25 to 500 JD which is relatively low. Although the MOH uses 180 smoking control officers to monitor smoking in the public places as well as monitoring shops from advertising tobacco smoking or selling the tobacco to juveniles, most of the officers are conducting their work in Amman and only a few of them work in other Jordanian cities.

The widespread attitude in Jordan is that smokers have the right to smoke indoors and cultural norms indicate that hosts are reluctant to ask smokers to put out their cigarettes, in fear of being impolite. Another problem in discouraging smokers by enforcing the law lies with health care providers and other people in Authority; it is not uncommon to see government officials setting a bad example by smoking in public and on camera during a televised indoor meeting.

The final, and may be one of the most important barriers that prevent anti-smoking legislation being put into action is due to the financial restrictions. The Jordanian government does not specify any budget to enforce tobacco control laws the same as other health laws. So the only financial source was coming from international organizations such as WHO and UNICEF.

### Suggested Alternatives

After evaluating the policy to ban smoking in Jordan, and after focusing on generality and weaknesses in policy, there are several alternatives and additions that must be taken into account and that is to quit smoking. We must provide governmental clinics for smoking cessation and drugs like alternative nicotine replacement therapy and treatment of smoking addiction as in substance addiction.

<i>Weakness</i>	<i>Suggested Alternatives</i>
A. Tobacco companies and smoking importing.	<ul style="list-style-type: none"> <li>• Restrict rules on Tobacco companies, stop smoking products being import, and hold the license for tobacco factories.</li> <li>• Increase the taxes on (factories and companies).</li> <li>• Block all advertising approaches.</li> <li>• Set a written penalty for this violation.</li> </ul>
B. Advertising, promotion and marketing.	<ul style="list-style-type: none"> <li>• Strict punishment for violation of the policy and especially by medical staff.</li> </ul>
C. The penalty for the violation of the policy.	<ul style="list-style-type: none"> <li>• Allocate a budget to prevent smoking.</li> <li>• Forcing factories and tobacco companies to compensate for suffering from diseases caused by smoking, such as lung cancer.</li> </ul>
D. No budget to prevent smoking.	<ul style="list-style-type: none"> <li>• Increase awareness and education bulletins about the disadvantages caused by smoking.</li> </ul>

Alternative	Effectiveness	Administrative ease	Legality	Equity	Cost effectiveness	Political acceptability
Governmental clinics for smoking cessation	Highly effective	Easy	Legal	Safe	Effective	Acceptable
Prevent smoking in home	Effective	Easy	Legal	Safe	May be effective	May be acceptable
Increasing the penalty	Effective	Easy	Legal	Safe	Effective	Acceptable
Nicotine replacement therapy	Effective	Easy	Legal	May be safe	Effective	Acceptable
Prices and taxes	Effective	Always easy	Always	Always	Always	Acceptable

To prevent home smoking by providing educational programs for parent smokers because of the significant impact on the behavior of youths in the future and whether they are going to smoke; much evidence suggests that policies related to youth access, in particular strong restrictions, are likely to play an important role in youth smoking behavior (Chaloupka and Pacula, 1998).

Increase awareness of the culture among health workers, academics, about smoking and their impact on the public attitude by increasing the penalty on them.

### Conclusion with Recommendations

It is clearly stated from the previous review that the major problem of smoking control policies in Jordan is

not at the level of legislations but at the level of implementation. The laws were already issued and developed since 1971 and 1977. And all other laws that were issued later are only updating for the same legislations over time. However, the mechanisms of implementing those legislations are not sufficient to prevent the spread of tobacco smoking. For example, the law of banning smoking



in public places did not prevent the hundreds of restaurants and coffee shops from serving tobacco smoking inside and outside the shops. Because employing 180 health officers centered at Amman to monitor shops is not enough to cover other Jordanian cities. Besides that, adequate resources should be provided for anti-smoking educational programs to ensure that these kinds of projects become more accessible to all Jordanians. Media also must be used more extensively to campaign for smoking ban policies. For example, the media must focus on the adolescents because they are more likely to be influenced by advertisement. Overall, in Jordan we need to increase our efforts and show serious commitment to enforcing tobacco control policies. Unfortunately, up to this moment, the mechanism of implementing the tobacco control policies is at the legislative bureau and introducing legislation without enforcement is not enough to fight the growing threat of tobacco smoking.

## References

- Belbeisi A, Al Nsour M, Batieha A, Brown DW, Walke HT (2009): A surveillance summary of smoking and review of tobacco control in Jordan. *Global Health*, 5(18).
- Census Bureau of Jordan (2012): Current Population Report 2012. Accessed September 2012. Retrieved from: [http://www.dos.gov.jo/dos\\_home\\_a/main/index.htm](http://www.dos.gov.jo/dos_home_a/main/index.htm)
- Chaloupka, Frank J. and Rosalie L. Pacula (1998). Limiting Youth Access to Tobacco: The Early Impact of the Synar Amendment on Youth Smoking, Presented at the 3rd Pacific Rim Allied Economic Organizations Conference, January, 1998, and the Second Annual Chicago & Great Lakes HealthServices Research Symposium, March 1998.
- Experts tackle religious, health issues on smoking. *The Jordan Times*; 2002.
- Jordan Ministry of Health, Directorate of Information and Research: Mortality data in Jordan, 2006. Information and Research Newsletter 2009, 1:1-4.
- Maayeh, S.P., (2003): Jordan: Mass Media Campaign Combating Smoking Requires Serious Commitment and Not Just Words. World Health organization.
- World Health Organization (2011), WHO report on the global tobacco epidemic, 2011: Warning about the dangers of tobacco. World Health Organization - Geneva, Switzerland.
- The National Information System: Jordanian legislation. Accessed September 2012. Retrieved from: <http://www.lob.gov.jo/ui/laws/index.jsp>

# ARE YOU TIRED OF...

- Painful Bedsores?
- Pneumonia and Other Respiratory Problems?
- Being Awakened for Turning?



## A TURN FOR THE BETTER! The Freedom Bed™



### Where Patient Comfort Meets Clinical Outcomes

The Freedom Bed is a unique turning bed that is automated, programmable and voice controllable. It is designed to meet the needs of the catastrophically injured or otherwise immobilized person with, or at risk of developing, pressure ulcers and other complications of immobility.



**Pro Bed**  
Medical Technologies Inc.



If interested contact us at:

**Abyad Medical Center**

E-mail : [aabyad@cyberia.net.lb](mailto:aabyad@cyberia.net.lb)

Tel : 00961-3-201901