UNIVERSITI PUTRA MALAYSIA

EFFECT OF EDUCATIONAL INTERVENTION ON THE INTENTION TO PROVIDE FAMILY-CENTRED CARE AMONG SELECTED HOSPITALS' PAEDIATRIC NURSES IN TEHRAN, IRAN

FOROUZAN ROSTAMI

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By

FOROUZAN ROSTAMI

Thesis Submitted to the School of Graduate Studies, Universiti Putra Malaysia, in Fulfilment of the Requirements for the Degree of Doctor of Philosophy

August 2015

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DEDICATION

Dedicated to the omnipresent God, my dear Lord for all the gifts that were given to us, my family for their love and endless support, and my great supervisor Professor Syed Tajuddin Syed Hassan for his valuable guidance and help.

Abstract of thesis presented to the Senate of Universiti Putra Malaysia in fulfillment of the requirement for the degree of Doctor of Philosophy

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Chairman: Syed Tajuddin Syed Hassan, PhD
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Family-centred care (FCC), which has become the cornerstone for paediatric nursing practice, supports the trust of child and family health. Families are recognised as an essential part of a specialised childcare during illness and they are expected to be skilful in childcare. In Iran, studies have shown that for parents to be involved in the care for hospitalized children there are obstacles that need to be discussed and investigated. There are huge gaps between effective health services and real world practice. Moreover, there is no common agreement between health care workers about provision of FCC in Iran. Hence, The main goal of this study was to examine, the effect of an educational intervention on the intention to provide family-centred care among paediatric nurses in Iran.

The research design of the study was quasi-experimental. A total of 200 paediatric nurses in two groups (100 intervention and 100 control), aged 25-55 from hospitals affiliated to Shahid Beheshti University (1 control and 3 intervention hospitals) in Tehran, Iran. Four hospitals were selected randomly based on the purpose of choosing hospitals that have paediatric wards for two groups (intervention and control groups). Proportionate sampling technique was employed. The educational intervention (two-day education classes) was conducted during the first month, and the effects on dependent variables of the study were assessed almost immediately after the intervention and three months later. In the intervention group, nurses were provided with presentations and internet-based education concerning FCC, in addition to booklets and pamphlets. The control group received one educational pamphlet about nutrition in children. To evaluate the effect of the intervention, data were collected at baseline, immediately following, and three months after the intervention, for both groups. Researcher-guided self-administered questionnaires were given to both groups prior to the intervention, immediately after the intervention, and three months after the intervention.

Descriptive and multivariate statistics (repeated measures ANOVA) were used for analysing the data. The mean age of participants was 36.1 years (SD = 9.1), and they were female (100%) without any specific training about FCC (93.8%). After the

intervention, there was a significant increase in the mean score of attitude [mean i.e. M (pre) = 3.35%, M (post) = 3.97, $P < 0.001$)], subjective norms [M (pre) = 3.72, M (post) = 4.21, $P < 0.001$)], perceived behaviour control [M (pre) = 3.36, M (post) = 3.75, $P < 0.001$)], and intention [M (pre) = 3.56, M (post) = 4.37, $P < 0.001$)], over the 3-month follow-up in the intervention group. The data provided preliminary support for effectiveness of the Theory of Planned Behaviour in producing constructs that significantly increased attitude, subjective norms, perceived behaviour control, and intention towards FCC in the intervention group.

The multiple linear regression models showed that changes in attitude, subjective norms, and perceived behaviour control scores were the predictors of the change in intention towards FCC. The most significant predictor was attitude ($\beta = 0.393$, $t = 5.914$, $p < 0.01$), followed by perceived behaviour control ($\beta = 0.320$, $t = 4.815$, $p < 0.01$) and subjective norms ($\beta = 0.172$, $t = 2.184$, $p < 0.01$). The last model was related to the follow-up test and the results showed the same pattern where attitude still showed the highest impact on intention ($\beta = 0.319$, $t = 4.889$, $p < 0.01$) followed by perceived behaviour control ($\beta = 0.309$, $t = 5.174$, $p < 0.01$) and subjective norms ($\beta = 0.264$, $t = 4.138$, $p < 0.01$).

The results provide evidence in support of the thesis that education can enhance attitude, subjective norms, perceived behaviour control, and intention to provide FCC within an educated group such as paediatric nurses, who represent a large portion of educated nurses in Iran. The study suggests that health care professionals can focus especially on teaching young nurses and parents to promote paediatric health through FCC.

Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi keperluan untuk ijazah Doktor Falsafah

KESAN INTERVENSI PENDIDIKAN TERHADAP NIAT UNTUK MENYEDIAKAN PENJAGAAN BERPUSATKAN KELUARGA DI HOSPITALS TERPILIH DI KALANGAN JURURAWAT PAEDIATRIK DI TEHRAN, IRAN

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Penjagaan Berpusatkan Keluarga ("Family-Centred Care"- FCC), yang telah menjadi asas bagi amalan kejururawatan paediatrik, menyokong kepercayaan kanak-kanak dan kesihatan keluarga. Keluarga diakui sebagai bahagian yang penting bagi penjagaan kanak-kanak yang khusus ketika menghidapi penyakit dan keluarga juga diharap perlu mahir dalam aspek penjagaan kanak-kanak. Di Iran, kajian telah menunjukkan bahawa bagi ibu bapa melibatkan diri dalam penjagaan kanak-kanak yang dirawat di hospital, banyak halangan yang perlu dibincang dan diselidiki. Terdapat jurang yang besar antara perkhidmatan kesihatan yang efektif dan amalan dunia sebenar. Tambahan pula, tidak terdapat persetujuan umum antara pekerja penjagaan kesihatan, tentang penyediaan Penjagaan Berpusatkan Keluarga (FCC) di Iran. Justeru, tujuan utama kajian ini adalah untuk meneliti, menganalisis, dan menghuraikan kesan intervensi pendidikan terhadap niat untuk menyediakan penjagaan berpusatkan keluarga dalam kalangan jururawat paediatrik di Iran.

Pensampelan secara berkadar digunakan. Reka bentuk kajian ini ialah separa eksperimen. Sebanyak 200 jururawat paediatrik dalam dua kumpulan (100 kumpulan intervensi dan 100 kumpulan terkawal), berumur 25-55 tahun dari hospital yang bergabung dengan Universiti Shahid Beheshti (1 hospital terkawal dan 3 hospital intervensi) di Tehran (Iran), telah dipilih. Empat hospital dipilih secara rawak berdasarkan hospital yang mempunyai wad paediatrik. Intervensi Pendidikan (dua hari kelas pendidikan) diadakan dalam bulan pertama, dan dinilai hampir sebaik sahaja selepas intervensi, serta tiga bulan kemudiannya. Dalam kumpulan intervensi, jururawat telah diberikan pembentangan slaid, dan pendidikan berasaskan komputer tentang FCC di samping beberapa buku kecil dan risalah yang berkaitan. Kumpulan terkawal menerima satu buku kecil pendidikan tentang nutrisi kanak-kanak. Bagi menilai kesan intervensi, data dikumpul sebelum intervensi, dan sebaik sahaja selepas intervensi, dan pada tiga bulan selepas intervensi, bagi kedua-dua kumpulan. Bagi setiap kumpulan, soal selidik secara swaguna bimbingan penyelidik telah diberikan, sebelum intervensi, sebaik sahaja selepas intervensi, dan tiga bulan selepas intervensi.

Statistik deskriptif dan multivariat (Pengukuran Berulang ANOVA) telah digunakan bagi menganalisis data menggunakan SPSS versi 21. Purata umur responden ialah 36.1 tahun (SD = 9.1) dan mereka ialah perempuan (100%) dan tanpa latihan yang khusus tentang FCC (93.8%). Selepas intervensi, terdapat peningkatan yang signifikan dalam purata skor tentang sikap [min iaitu M(pra)= 3.35%, M(pasca)= 3.97, P<0.001)], norma subjektif [M(pra)= 3.72, M(pasca)= 4.21, P<0.001)], kawalan tingkah laku tercerap [M(pra)= 3.36, M(pasca)= 3.75, P<0.001)],dan niat [M(pra)= 3.56, M(pasca)= 4.37, P<0.001)], dalam tiga bulan janka masa susulan, dalam kumpulan intervensi. Data menyokong secara awalan, tentang keberkesanan Teori Tingkah Laku Terancang dalam menghasilkan beberapa konstruk yang signifikan, yang meningkatkan sikap, norma subjektif, kawalan tingkah laku tercerap, dan niat terhadap FCC, dalam kumpulan intervensi.

Model regresi linear berganda menunjukkan bahawa perubahan sikap, norma subjektif, dan skor tingkah laku terkawal tercerap, merupakan prediktor perubahan FCC dari segi niat. Prediktor yang paling signifikan ialah sikap (β= 0.393, t= 5.914, p<0.01), diikuti oleh kawalan tingkah laku tercerap (β= 0.320, t= 4.815, p<0.01) dan norma subjektif (β= 0.172, t= 2.184, p<0.01). Ujian susulan selepas tiga bulan intervensi juga menunjukkan corak yang sama, iaitu aspek sikap masih merupakan pemberi impak yang paling tinggi terhadap niat (β=0.319, t=4.889, p<0.01), diikuti oleh tingkah laku terkawal (β=0.309, t=5.174, p<0.01) dan norma subjektif (β=0.264, t=4.138, p<0.01).

Hasil kajian memberikan bukti yang menyokong tesis tentang pendidikan dapat mempertingkatkan sikap ("attitude"-ATT), norma subjektif ("subjective norms"-SN), tingkah laku terkawal tercerap ("perceived behavior control"-PBC), dan niat ("intention"-INT) bagi menyediakan FCC dalam kumpulan yang berpendidikan seperti jururawat paediatrik, yang mewakili sebahagian besar jururawat terdidik di Iran. Kajian ini juga mencadangkan supaya golongan profesional penjagaan kesihatan dapat memberikan tumpuan, terutamanya dari segi mendidik jururawat dan ibu bapa muda untuk meningkatkan kesihatan paediatrik, melalui FCC.

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This thesis was submitted to the Senate of Universiti Putra Malaysia and has been accepted as fulfillment of the requirement for the degree of Doctor of Philosophy. The members of the Supervisory Committee are as follows:

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LIST OF ABBREVIATIONS

FCC	Family-Centred Care
PCC	Patient-Centred Care
PFCC	Patient and Family-Centred Care
IPFCC	Institute of Patient and Family-Centred Care
PICU	Paediatric Intensive Care Unit
TPB	Theory of Planned Behaviour
TRA	Theory of Reasoned Action
ATT	Attitude
SN	Subjective Norms
PBC	Perceived Behaviour Control
WHO	World Health Organization
MPOC	Measure of Process of Care
CSHCN	Children with Special Health Care
CCNFI	Critical Care Family Needs Inventory
FPOR	Family Presence during Paediatric Cardiopulmonary Resuscitation
IMCI	Integrated Management of Children Illness
UNICEF	United Nations International Children and Emergency Fund
ANOVA	Analysis of Variance
RMANOVA	Repeated Measures Analysis of Variances
SD	Standard Deviation
ICU	Intensive Care Unit
NICU	Neonatal Intensive Care Unit
AAP	American Academy of Paediatrics
IPFCC	Institute of Patient and Family-Centred Care
UNEPSA	Union of National European Paediatric Societies and Associations
NHS	National Health Services

CHAPTER 1

INTRODUCTION

1.1 Background

During the past 20 years, the pattern of mortality in children has dramatically changed as life expectancy in neonatal and infantile ages has increased (Hockenberry & Wilson, 2009). These changes were due to advances in medical technology, control and management of diseases, in-time diagnosis and progress in public health as well as preventive measures. Significant decrease in mortality rate has increased the number of children with special health care needs and with chronic conditions, who are in need of more medical services than ordinary medical conditions (Hockenberry & Wilson, 2009).

Family is defined as a unit made up of child admitted to hospital and his or her caretakers who are bound together by emotional, biological, economic or other ties (Maijala & Astedt-Kurki, 2009). The family role is pivotal to the child's sense of security and trust in hospital (Hopia *et al*., 2005; Lehto, 2004).

When a child develops severe or chronic diseases, the family has to readjust their daily activities and commitments due to the need to care for the child. Daily activities of the family previously planned to meet its needs are converted to satisfy the present needs of the child (Ahmann, 1994). In addition to the influence of disease on the child and the family, the health care system is also affected, leading to decreased quality of life and increased medical costs for society (McCarthy *et al*., 2002). Nevertheless, the family is the basic unit of society and it is considered the primary unit of care (Harrison, 2010). It seems that family-centred care (FCC) would be a central part of child nursing (Hutchfield, 1999). Traditionally, the focus of nursing is on the provision of care to individual patients. However, every patient is also a member of a family. Family nursing is a practice and a science that has been developed over the past 20 years as a way of approaching and working with families. All nursing, according to this way of thinking, should be done in the context of the family (Hanson, 2005).

During the past 40 years, great advances have been made in medical science and technology to satisfy the physical needs of a sick child; however, psychological needs of the child and the family have received less attention (Saunders *et al*., 2003). Studies regarding the needs of families with hospitalised children show that their important needs include respect and support as well as cooperation in the health planning of their children (Conway *et al*., 2006; Kuo et al., 2012; Wells, 2011).

These three concepts are the components of FCC (Pettoello-Mantovani *et al*., 2009). Furthermore, in families' points of view, nurses, compared to other health professionals, have to attend much more to their needs, respect the activities and capabilities of them in providing care more and support in the best possible way (Balling & McCubbin, 2001).

According to reports of the Institute for Family-Centred Care in the USA, FCC can be implemented in any nursing area. For example, in neonatal wards, parents reported

feeling less anxious after the adoption of FCC. Also, FCC leads to shorter hospital stay and fewer re-hospitalisations (Conway *et al*., 2006).

A number of authors have compared traditional medical approaches with patient-centred care. Today, patient-centred care is widely acknowledged as a core value in family medicine (Hudon *et al*., 2011). Health care workers should use principals of FCC during the admission process of children in the hospitals (Bowden & Greenberg, 2007). The concept of FCC was described by the Association for the Care of Children's Health (ACCH) in 1987 (Harrison, 2010) as including the following eight equally important elements:

1. recognition that the family is the constant in the child's life whereas the service systems and health care workers within those systems change.
2. facilitation of parent and professional collaboration at all levels of health care.
3. recognition of family strengths and individuality and respect for different methods of coping and adaptation.
4. sharing unbiased and complete information with parents about their child's care on an ongoing basis in an appropriate and supportive manner.
5. encouragement and facilitation of parents-to-parents support.
6. understanding and incorporating the developmental needs of infants, children, and adolescents and their families into the health care delivery system.
7. implementation of appropriate policies and programmes that are comprehensive and provide emotional support to meet the needs of families.
8. assurance that the design of health care delivery systems is flexible, accessible, and responsive to family needs.

Researchers have utilised the theory of planned behaviour (TPB) in the area of providing FCC by nurses as a framework to understand stages of behavioural changes and their determining factors. It is a valid theory in understanding human behaviour (Mathew *et al*., 2007). TPB is an extension of the Theory of Reasoned Action that also measures self-efficacy beliefs, also known as perceived behavioural control (Bandura, 1977). The TPB was developed and introduced by Fishbein and Ajzen in (1985). Thus, the TPB can predict behaviour by three factors; attitude toward the behaviour (ATT), subjective norms (SN) and perceived behavioural control (PBC). According to the TPB (Fishbein & Ajzen, 1975), intention can be determined by the attitude toward performing the behaviour and subjective norms and perceived behaviour control.

Attitude can predict the intention of an individual to perform behaviour about an objective. Fishbein and Ajzen (1975) state that attitude can determine a person's overall intentions. Attitude influences the general level of person's intention and the relationship between attitude and intention can be determined if the intention is measured. High correlation between attitude and intention is expected when attitude and intention are measured at the same time and on the same target. Thus, the measuring of intention can predict positive or negative behaviour.

Fishbein and Ajzen (1980) argue that high influence of subjective norms in a person can provide a greater intention to perform behaviour. Assessment and measurement of subjective norms for predicting and understanding intentions are necessary. In some situations, both the attitude and subjective norms are not equally weighted for the behavioural intention. A person may have a positive attitude towards performing a specific behaviour but his or her subjective norms suggest that he or she should not perform it or vice versa (Ajzen & Fishbein, 1980). The perceived behavioural control

reflects the perception of internal and external constraints of behaviour (Ajzen, 1985).Thus, a person's perception of control over behaviour that the person is able to control their behavioural performance is defined as perceived behavioural control.

The effects of attitude (A) and subjective norms (SN) and perceived behavioural control (PBC) are mediated by behavioural intention (BI). Intention is viewed as being related to the corresponding behaviour. Behavioural intention in individuals is a subjective probability that they will perform some behaviour and this is regarded as a function of attitude and the subjective norms. The best predictor for behaviour is the intention to perform the behaviour, thus, the measure of intention will lead to accurate prediction of behaviour. Furthermore, accurate prediction of behaviour depends on the strength of the intention-behaviour relationship (Fishbein & Ajzen, 1975).

Explanation of behaviour is considered in the PBC. This theory provides a comprehensive framework that has been used to explain many of the findings in behavioural change. Ajzen and Fishbein (1980) state that measurement of the variables of the TPB for understanding the relationship among variables is necessary. These measurements include: 1) attitude toward behaviour, 2) subjective norms, 3) perceived behaviour control, 4) intention to perform behaviour, and 5) behaviour.

The Theory of Planned Behaviour was likely to be most applicable in developed countries such as Canada and USA. However, it is essential to test this theory in developing countries such as Iran. This is especially important with respect to the concept of family-centred care. The Theory of Planned Behaviour was applicable through different approaches in developed countries such as Spain (Gonzalez et al., 2012), Australia (Kam et al., 2010), USA (Matthew et al., 2007), UK (Arnold et al., 2005), and Europe (Topa, 2010). There is thus a need to test FCC (based on TPB) in developing countries such as Iran. The hospitals in developed countries are well resourced, while many in developing countries, such as Iran, function with limited resources. Nurses in developing nations may apply FCC developed from the knowledge base of developed countries, but this might be culturally inappropriate (Shields & Nixon, 2004).

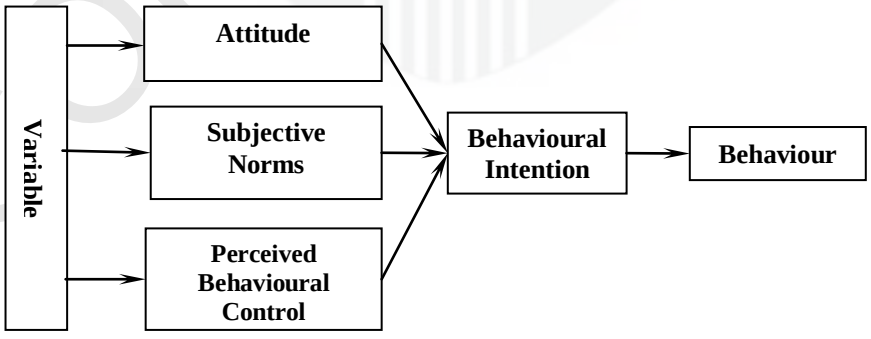

Figure 1.1: Theory of Planned Behaviour (Ajzen & Fishbein, 1985)

1.2 Problem Statement

The organization of paediatric care shows profound differences and divergent problems throughout the world, particularly between economically advantaged and challenged countries (Pettoello-Mantovani *et al*., 2009). However, significant differences also exist among the economically developed countries. For instance, in the US, the concepts of family-oriented and family-centred care emerged and developed to become consolidated parts of its health system over the past fifty years. However, it has been observed that the US stands apart from most similarly developed countries in having a coherent set of public policies that would create a social context supportive of families, traditional or otherwise (American Academic of Paediatrics, 2003).

In Iran, the mortality rate among children has decreased considerably from 87 to 51 deaths per 1000 live births (UNICEF, 2012). In absolute terms, this means that the number of children who die each year has decreased from 12 to 6.9 million on a global basis. In spite of this significant achievement, more than 19,000 children still die every day, and most of these deaths are caused by preventable and treatable infectious diseases and by the deficiencies in family-centred practices. About 80 per cent of healthcare in developing countries occurs at home, and the majority of children die at home without being seen by a healthcare worker. It has been hypothesized in a report on equity and access to quality care that as many as 40% of children's deaths could be prevented with improved family and community care by providing access to solid knowledge, support, and basic provisions. In Iran, which has a total population of 74 million people, the infant mortality rate is 41(deaths/1,000 live births).

The statistics in Iran showed that 6.5% of neonates were of low birth weight among which 75% were premature and needed to be hospitalized in neonatal intensive care unit (NICU) (Ramezani *et al*., 2014). This experience threatens not only neonates' health, but also family members' health and brings about a vast array of problems (Farahani *et al*., 2014). This causes a delay in parental-neonatal attachment (especially for mothers) and upsets mothers' attachment process toward their children. In the Middle East, health care has undergone some changes with an increased stress on FCC, which is defined as a health care that recognizes the need for a partnership among healthcare workers, patients, and patients' families in a suitable and holistic manner. This partnership should ensure that the decisions that are made respect the wants, needs, and preferences of the patients and their families (Aliabadi *et al*., 2011).

The Iranian tradition has maintained a strong family bond and parental responsibility for the care of children. Parental contribution to hospital care is a symbol of the strength of the Iranian tradition. The National Health Services in Iran have begun a movement for improving health care services in different settings based on consumer needs (Corlett and Twycross, 2006). The role of FCC in pediatric nursing, common understanding between the nursing staff and the child's parents can lead to providing higher quality of medical attention. However, nurses and parents have different perceptions of stressors in the child's admission to a hospital in Iran (Hassan Tehrani *et al*., 2012).

In recent years, health care professionals have accepted that appropriate treatment should be done involving relationship and interaction between the family and the medical team at the hospital. This is one of the fundamental components of care and the philosophy of FCC (Khosravian *et al*., 2013). Although improving the quality of

nursing care and higher patient and nurse satisfaction have been reported as the desired effects of family involvement in the nursing care of patients, neglecting the needs of the patients' families and imposing them more responsibilities than their capabilities can have adverse effects such as feelings of inadequacy and inability (Aein *et al.*, 2009). Few studies have assessed the status of participation of the patients' families as well as the views of families and nurses concerning the role of families in caring for their relatives. In particular, there is not enough reliable evidence on the status of participation of the families in the care of their patients. Family participation is a key indicator of family-centered care in Iran (Molazem *et al*., 2011; Zarei *et al.*, 2009).

Interaction and relation of the families with the hospital treatment team is one of the essential components of care, but this need was not properly met. The effective presence of the nurse can balance the role of the family beside the patient. In this regard, training the personnel for better and more understanding of the families and involving them in the care based on their abilities according to the philosophy of family-centered care has been suggested (Khosravian *et al*., 2013).

Fakhr-Movahedi *et al*. (2011) studied the nurse-patient relationship in Iran and showed that factors such as organization, culture and tradition, expectations from nurses, and heavy workloads can limit the time allocated to communicate with patients and reduce the effectiveness of communication. In addition, although nurses' communication behaviour including friendly personality, kindness, quick response, and timely attending to the needs of patients and allocating sufficient time to provide care could improve communication with the patient, heavy workload and shortage of nurses are common problems prevalent in the training hospitals of Iran, which could potentially affect this behaviour (Zamanzadeh *et al*., 2014).

Despite substantial investments in researchers, dissemination and advocacy, a huge gap exists between what is known about effective health services and what is done in real world practice and there is not a consensus among health care workers about the provision of FCC in Iran. These barriers may be due to lack of knowledge and skills, lack of support, law, nurses' powerlessness, nurse-patient relationship, and recognizing patient needs that could be influential in the provision of FCC in Iran. It seems that participation of parents in care of their hospitalized children needs more discussion and research in Iran.

Most of the studies have considered the viewpoints of the parents, disregarding the viewpoints of the nurses in Iran. A small number of studies have researched about provision of FCC on TPB by nurses. However, there is no definitive study based on the concept, analyzing in depth the influence of ATT, SN, and PBC, and the interactions. As a result, this study focuses on ATT, SN and PBC of nurses related to the implementation of family-centered care in pediatric wards. The present study was done in an Iranian context in an effort to address the following questions:

- Is there a relationship between TPB elements and nurses' intention to provide FCC?
- Is there an intervention impact on the nurses' ATT, SN, PBC and intention to provide FCC?

1.3 Scope and Significance

Community health scholars contend that the integrity of community-based nursing is based on FCC (Ayers, Bruno, & Langford, 1999) and state that the individual client is part of a general unit as family. Therefore, the needs of this unit should be systematically assessed and met (Potter & Perry, 2009).

During the recent decade, family and patients' satisfaction with the health care system has gained increasing attention as a valid and reliable criterion to measure quality of care. This also applies in nursing and medical interventions for children. Due to the role of children in the health of society and future generation, their parents are regarded as their respondents and representatives. Parents as advocates of children in health care system are suitable indicators to reveal the views of children. In spite of extensive support for FCC, many hospitals still do not apply the principles of this philosophy persistently. Additionally, in organizational cultures of hospitals, there are barriers and limitations for including viewpoints of patients and families and their involvement. Central to these restrictions are the lack of understanding of their needs and knowledge concerning FCC (Conway *et al*., 2006).

FCC is a new phenomenon or innovative approach to planning and evaluation is based on mutual understanding and beneficial partnership among health care professionals, patients and families (Johnson *et al*., 2008). The central concepts of FCC include dignity, exchanging information, participation and cooperation or collaboration (Johnson *et al*., 2008). The core of this definition of FCC is the relationship between families and health professionals and understanding that families are considered full partners in the provision of health care to children (MacKay & Gregory, 2011). The family has a pivotal and critical role in the development and nursing of their child (Harrison, 2010). Although FCC is approved as an interesting idea in many paediatric institutions, biased attitudes of health care workers toward parents and families have hindered its complete and successful provision (Depompei, Whitword, & Beam, 1994).

Perceptions of parents and staff about the care of hospitalized children have been explored in developed countries; however, little research has examined these perceptions in developing countries. Assumptions about family-centred care are often based on Western values, with little evidence of how cultural constructs may affect care delivery in developing nations (Sheild & Nixon, 2004).

1.4 Research Question

Can an educational intervention on paediatric nurses improve their attitude, subjective norms, perceived behaviour control, and intention towards provision of family-centred care?

1.5 Research Objectives

General Objective

To determine the effect of an educational intervention on the intention to provide family- centred care services among nurses in Iran based on the Theory of Planned Behaviour.

Specific Objectives

1. To determine the relationship (Pearson product-moment correlation coefficient r, and linear multiple regression) between respondents' (nurses) socio-demographic characteristics and attitude, subjective norms, perceived behaviour control, and intention in the provision of family-centred care.
2. To compare the nurses' attitude about the provision of family-centred care before and after the intervention between the intervention and control group.
3. To compare the nurses' subjective norms related to the provision of family-centred care before and after the intervention between the intervention and control group.
4. To compare the nurses' perceived behaviour control related to the provision of family-centred care before and after the intervention between the intervention and control group.
5. To compare the nurses' intention to the provision of family-centred care before and after the intervention between the intervention and control group.
6. To determine the effect of an educational intervention on the intention of nurses to provide family-centred care during the study.

1.6 Research Hypothesis

Socio-demographic characteristics of nurses (age, income, training and work experience in paediatric ward) are significantly associated with attitude, subjective norms, perceived behaviour control and intention in the provision of family-centred care behaviour by nurses.

1. There are significant differences, between nurses' attitude towards the provision of family-centred care, comparing intervention and control groups.
2. There are significant differences, between subjective norms related to the provision of family-centred care by nurses, comparing intervention and control groups.
3. There are significant differences, between perceived behaviour control related to the provision of family-centred care by nurses, comparing intervention and control groups.
4. Nurses' attitude, subjective norms and perceived behaviour control significantly predict the intention of the provision of family-centred care.

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