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Editorial

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Community Nursing

FROM THE EDITOR

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This is the second issue this year and it is apparent that there is not much interest and research in the field of nursing in the region. However this issue is rich with papers from the region and from Australia and we look forward for improvement in the number of papers submitted from nursing teachers in the region.

A paper from UAE looked at whether proper gloving handling can decrease infections in hospital settings. The authors stressed that there is a lack of knowledge amongst healthcare providers regarding the transmission of micro-organisms that are responsible for hospital acquired infections. The paper revealed that there is a need to motivate nurses to adhere to gloving practices by providing in-service training programs.

A case report from Nigeria looked at loss of vision following severe ocular injury resulting from corporal punishment. The report is that of a Nigerian child who lost vision in his left eye following traumatic hyphema. The patient who had enjoyed good vision in both eyes prior to the incident sustained blunt trauma to his left eye in the course of corporal punishment by a school teacher. The patient was placed on conservative management and the hyphema resolved completely however the vision was nil perception of light in the affected eye due to secondary glaucoma. The need to abolish corporal punishment cannot be overemphasized so as to prevent avoidable injuries.

A survey questionnaire from Iran looked at The Role of Social and Cultural Factors in Gender inequality. The findings suggest that gender inequality evidently exists, and the most significant factors influencing gender inequality in Iranian families are gender socialization, functional role, patriarchy ideology, cultural capital, and educational role, respectively, which accounts for 97.5% of the dependant variable. The authors concluded that regarding the findings of this research, it seems that while there is a decreasing gender inequality in the family, the civil law and the stereotyped beliefs of the society, especially men towards women, must be changed.

A paper from Australia looked at Hospitalised Children: Reactions of Siblings. Hospitalisation of a sick child is perhaps one of the most traumatic events a family can face. Parents react swiftly to the trauma of a sick child, and there is a considerable body of research on the effects of hospitalisation on the child and its parents. However, there is extant research on the effects of hospitalisation, on the child's siblings. The aim of the author was to critically review the literature in relation to the environment and the effects of hospitalisation on the siblings' psychological and physiological health, their behaviours and attitudes, and responses to the illness of the brother or sister.

Another paper from Australia looked at Transcultural Competency in the Curricula of Nursing. Globalization and immigration are causing a rapid growth of culturally diverse populations, therefore, now more than ever, health care providers must become more aware of and sensitive to the culturally diverse meanings of health, illness, caring, and healing practice. The authors reviewed the implications of cultural and ethnic diversities on the health care system and explores the dimensions of the term "Cultural Competence" in relation to nursing practice and education.

HOSPITALISED CHILDREN: REACTIONS OF SIBLINGS

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Summary of project

Hospitalisation of a sick child is perhaps one of the most traumatic events a family can face. Parents react swiftly to the trauma of a sick child, and there is a considerable body of research on the effects of hospitalisation on the child and its parents. However, there is extant research on the effects of hospitalisation, on the child's siblings. There is little understanding of the connection of the siblings to this traumatic occurrence whereby they can become confused and frightened when seeing their parents' sad and angry and frustrated reactions (Barlow & Ellard, 2006). The following project explores reactions and coping mechanisms of siblings and parents of hospitalised children. The aim of this project is to critically review the literature in relation to the environment and the effects of hospitalisation on the siblings' psychological and physiological health, their behaviours and attitudes, and responses to the illness of the brother or sister.

There is much evidence in the literature supporting the relationship between hospitalised children and their parents and siblings. Recommendations have been formulated to improve and develop a set of guidelines that assist the parents to find the best approaches that can be used to help the siblings cope with the change of circumstance. These recommendations include the anticipation of health care provides of the challenges that might be experienced by parents and siblings, the active participation of parents and children in caring of the ill child and the seeking of professional counselling services by parents and siblings.

Introduction

It is only natural for parents of hospitalised children to want to be actively involved in activities aimed at ensuring the well being of their children. A family is the basic unit of every society and it provides members with the sense of comfort, belonging and identity. It is well documented that the role played by parents of children in paediatric care is significant for the psychological and emotional well being of the children. Additionally, parental involvement has also been identified to be beneficial to the parents (Lam, Chang & Morrissey, 2006).

In addition to those children under paediatric care due to curable diseases, there are also the children who are admitted with chronic diseases where the chances of survival are slim or they might require extensive hospitalisation. Some of these diseases require a greater emphasis on the quality of life. Provision of the quality life to the child requires that the parents invest more emotionally on the child. The implication is that the parents are prone to become worn out emotionally. Furthermore, there is also the danger of other siblings being deprived of emotional support. Studies outlined by Foster et al. (2009), more than half a million of the children in the United States are currently living with life threatening diseases. Furthermore, the study indicated that close to 50% of the children living with life threatening diseases are suffering from cancer. According to Foster et al. (2009), substantial evidence actually indicates that the siblings of children hospitalised for chronic illnesses are at risk of being emotionally ignored by parents and being taken for granted by health care providers. Nursing require the provision of support services to both parents and siblings of the chronically ill children to ensure that they are conversant with the patient's condition. The support to the children should be done with consideration of their capacity to understand and absorb the shock and grief.

The project will identify an introduction of hospitalised children, hospitalised children effects on parents and siblings, the relationships between siblings, the factors influencing parents and siblings to cope with hospitalisation, and well critically review the changes in siblings' cognitive and emotional behaviour in respect to hospitalised children and the responses of their parents. In undertaking this project, an extensive literature review was conducted using the RIMT library database, ProQuest, Science Direct, PubMed and Google.

Statement of Problem

Children are weak and vulnerable. They establish great psychological and emotional attachment to family, to their parents and relatives, and especially to their brothers and sisters. Any change in the normal setting, particularly a traumatic change when a child falls ill or has an accident, can be devastating to their self-confidence, can realign their relationships with parents and siblings, and can have lasting effects on the growing individual (Bhat & Rawat, 2004).

Most parents with terminally ill children usually become confused and frustrated, uncertain how to respond to the situation and they devote the majority of their time and energies to attempting to resolve the situation at hand (Jones & Weisenfluh, 2003). In the process, they may fail to notice the changes and challenges their other children are undergoing. Even if the parents recognise the disintegration of the family relationships, they may not be in an emotional state to attend to their other children's psychological and sometimes physical needs. Treats and recreational activities are dispensed with; children cannot or will not seek their parents' reassurances in times of great trial (Aujoulat, Simonelli & Deccache, 2006; Kyle & Kyle, 2007). Some parents however may notice the change but find no time to talk to them or find a lot of difficulty in addressing the issue.

Long term and persistent unaddressed suppressed fears caused by a hospitalised child are a danger to the health and social behaviour of siblings. Frequently this is manifested by withdrawal, where a child retains concerns because of fears of adding to parents' anxiety or through perceptions of being ignored. Psychological stress can be present through aggressiveness and fear. Siblings of sick children become overactive or restless, can feign or actively seek sickness as a means to retrieve parents' attention (Craft, Sandel, & Wyatt, 1985). According to Morgan and Attfield (2006), siblings of children with autism are always worried that their parents will give the ill child more attention.

It is therefore important to assess the environment that a sick child creates in family relationships. The social and psychological processes involved with those coping with sick children can be determined through data-gathering and analysis to identify causative factors which in turn can lead to coping strategies in managing these distressing family environments. The intention of this project is to identify and promote better communication paths which parents could adopt to move toward cognitive resolution of the hospitalised child by the siblings by providing them with relevant information that would assist them to handle delicate matters for the benefit of their children.

Aims of the Project

The objective of this project is to establish the emotional, psychological, and health changes that siblings of hospitalised children undergo. This is supported by the following goals:

- To identify coping strategies for parents so that the sick child's siblings are not alienated and suffer harm the family's unfortunate experiences with illness.
- To identify what the recommendation and approaches of coping strategies are found in the literature that will assist the parents and siblings in such difficult situations.

Background to the Study / Rationale

As outlined previously in this study is the fact that the chronically ill child will draw much emotional and physical support from family members. The support should be devoid of any grudges or complaints, so that the child does not develop feelings of being indebted to those providing support. Therefore, the emotional condition of the family members is important towards the provision of support to the child. Studies to pertaining to the challenges faced by family members of chronically ill patients have been conducted and the results have been documented as well.

In a study conducted by Glasper and Richardson (2006), to outline the experiences of siblings of sick children in the paediatric care, it was established that a significant number of children in the United States are spending time under paediatric care and that around 3 million families were affected by the need to provide care to the children. Unlike other studies where data collection and analysis are always based on vague and poorly defined options, the study grouped the results into; "increased risk, no risk, and positive and negative outcomes". The findings of these studies realized that family members are significantly important in the well being of a chronically ill child. It also realized that siblings of chronically ill child may be affected especially when the roles and responsibilities have to be adjusted for the sake of the ill child. The two areas where siblings were affected are having to take part in taking care of the ill child during feeding, dressing and in some instances assuming adult responsibilities, and siblings who may be affected by the fact that the ill child is being given most of the attention and the parents may have little or no time to address the concerns of the siblings.

In a related study by Lindblad, Rasmussen and Sandman (2005), that sought to establish the ways in which parents taking care of disabled children may be empowered, the findings realized that parents respond in varied ways some of which may be unhealthy for the child and the parents. For instance, some parents may develop the feeling that the child does not deserve to be taken care of. The study analysed the responses by 10 mothers and 6 fathers caring for 11 children between the age of 6 and 11. Qualification to participate in the study required that children under care were significantly dependent on their parents due to some physical or mental disability. Although, the children were not chronically ill, the study would provide insight as to how parents may respond to children who required extensive care due to one reason or another.

Another research conducted by Broome and Snethen (2001), the response of siblings when their brothers or sisters were placed under clinical research was documented. Various factors were realized and one significant factor was that certain factors determined the level of understanding of the situation that their brother or sister was going through. Age of the sibling and the medical condition were identified as the two most recurring determinants. The study realized that siblings played an important part in the alleviation of stress among themselves. This occurred as a natural response that was not only eminent during illness, but also during normal conditions. The research adopted favourable conditions where siblings were interviewed by paediatric specialists and the age of the siblings were between 7 and 21 years. The research also realized that there were three areas of concern for the siblings whose brothers or sisters were undergoing research. The areas included their overall understanding and interpretation of the research, ethical implications of the research, communication methodology employed by the health care and the way the research affected the normal routines in their respective families. This research provides evidence that siblings require attention by care givers to help them in understanding of the medical condition affecting their brother or sister. Furthermore, the siblings are always concerned how the illness of a brother or sister may affect the family routine in general.

A study by Mitchell and Courtney (2004), which sought ways to reduce the anxiety and uncertainty experienced by family members due to transfer to or from the Intensive Care Unit (ICU), realized that the anxiety and uncertainty experienced were due to a number of reasons. The first one was that most families were not conclusively aware of the reasons behind the transfer and the implications following such transfers. Secondly, in the ICU and the other normal wards were characterized by different conditions ranging from the level of care provided to the children and the equipments used. Therefore, family members may feel that the children will not be catered for properly after being moved from the ICU. Among the findings of the research was that the anxiety experienced had nothing to do with the physical environment, but as due to the diagnosis conducted. The implication of the research is that family members need clarification on certain medical procedures to alleviate anxiety and uncertainty that may ensue. This study implies that even in instances where siblings are not actively involved, they may sense the anxiety and concern being experienced by parents and subsequently become depressed especially when the situation is not explained to them.

In a study conducted by Huizinger et al. (2004), to establish the factors that enabled adolescents and siblings to cope with cancer more effectively and thereby improving their quality of life, it was realized that the environment played a critical role. Analysis of the responses realized that the siblings were also affected by the environment where their brother or sister was in. Therefore, it is also to take into account the environment of hospitalisation when seeking to address the needs, concerns and siblings. The hospital environment may either alleviate or worsen the anxiety felt by siblings. Anxiety may be evidenced by refusal of the siblings to visit their hospitalised brother or sister.

An additional study conducted in Sweden by Kristofferzon, Lofmark and Carlsson (2005), to establish how men and women respond differently one month after myocardial infarction of their child, it was realized that both men and women were affected socially and emotionally by the condition of the child. However, the two groups differed in terms of where they mostly got their social support and how they coped with the situation. Women employed a more evasive and supportive coping mechanism and perceived that psychological dimensions of the disease as presenting a major challenge as compared to men. Therefore, such varied mechanisms of response as dictated by age should be placed into account when seeking to provide holistic support to parents with chronically ill children.

These studies substantially provide evidence that parents and siblings of a chronically ill child are significantly affected by the child's condition. Parents and siblings are affected physically, emotionally and even socially. The parents are affected in terms of not being able to cater for the child effectively as a result of the illness, anxiety and concern for the child's condition and the way the hospital is responding to the condition, balancing between taking care of the child, being available for other children an attending to their work, and having the capacity to hold the family together during the challenging experience. However, the siblings are also experience challenges in terms of anxiety on whether the medication being given is appropriate, concern over how the condition is going to affect the family routine, having to depend on their parents less and less in terms of emotional support and other forms of support, development of anger towards the ill child and finally having to revert to unhealthy ways for coping with the situation.

Hospitalised Children Effects on Parents and Siblings

Parents' Reactions

Most chronically ill children require specialised care due to the delicate nature of children and due to the condition that the disease puts the child in (Bhat & Rawat, 2004). Some chronic illnesses incapacitate children either fully or partially and parents are often required to take extra care when performing duties such as; breastfeeding, changing and washing. In addition, parents are also required to ensure that they adhere to medication in instance where the child is recovering at home. Apart from the physical support the child may also require is additional emotional support to prevent depression that may be associated with the medication. As outlined by Smith (2004), parents of children in Hip

Spicas face difficulties ranging from breastfeeding and having close physical contact and therefore they are at risk of experiencing social and emotional problems due to frustrations.

The feelings of frustrations originate from the fact that the parents are not able to effectively care for their children and also due to the detachment from their children (Barlow et. al, 2008). In cases where the chronic illness is associated with disability, the parents are required to balance on emotionally and physically being available for the sick child and attending to the needs of the siblings and attending to their normal duties such as going to work. All these responsibilities may leave the parents fatigued and emotionally drained. Therefore, parents find themselves not being able to effectively care for the other siblings and they may also not be able to be productive in their work places. Frustration may also stem from the fact the parent may feel that the health care providers are not giving the child the care deserved (Hardy & Prior, 2001). Concerns may be in form of the environment the child has been placed. This is because some environments worsen the symptoms in terms of pain and discomfort. Different conditions require specialised care and it is important that this fact is put into consideration. The parent may also be frustrated when their questions are ignored or are not answered conclusively (Ramritu & Croft, 2009, Rutter & Taylor, 2002).

According to Ramritu and Croft (2009), the most frustrating aspect of a child's illness to the parents is the state of uncertainty and the fluctuating condition of the child. The parents might experience anxiety and even fear for the child. This is because the condition of the child that may fluctuate in terms of progress and the parent may also experience the fluctuation between hope and hopelessness. According to Cullen and Barlow (2004), parents with children with disabilities are more prone to depression as compared to their counterparts whose children are experiencing normal development. The psychological and physiological condition of the parents is expected to affect the siblings significantly. Although much research has been on the affect of hospitalisation children on their parents, emerging evidence suggest that children are even more affected (Armstrong-Dailey & Zarbock, 2009). Research has established that siblings are affected by their parents' condition, the condition of the sick child and the resultant disruption in family routine. Knowingly or unknowingly parents continually find themselves overlooking the needs of the siblings while concentrating on the sick child (Kyle & Kyle, 2007).

The realization by the parents that they have a child that has been hospitalised generally goes through stages. First, there is the aspect of denial, followed by self blame and then acceptance. Denial is always characterized by the perception that it is impossible for their child to have such an illness. As outlined by Brannon and Feist (2009), this is a general reaction when people are faced with a challenge they feel is beyond their capacity. During the denial stage, both parents are usually draw strength from one another. However, during the self blame stage, the parents are always taking their frustrations upon each other. It is during this instance that the fear of the family breaking up is most evident on the siblings. During this period, the parents will concentrate more on attacking each other and striving to be the innocent one in the situation. In most instances, the sick child and the siblings may be drawn into the tension.

Siblings' Reactions

Sibling reaction to hospitalised brothers or sisters may be subtle and therefore prone to be ignored by the parents and caregivers. In most instances, siblings are left in the dark as the parents and care givers assume that they would not understand or it would be better for them if they do not know (Doherty, 2009; Jolley, 2010).

There is substantial evidence supporting the fact that when a child is hospitalised, it is not only the hospitalised children and the parents who are affected with this condition, but the siblings as well (Stoneman, 2005). A family is a close knit society where members derive identity and support of different kinds. The family is the ultimate place that a person turns to during trying emotional and psychological times due to the high levels of understanding and intimacy (Glasper & Richardson, 2006).

According to Bhat & Rawat (2004), siblings of a hospitalised children may be at a risk of contracting the same disease in a situation when the disease in contractible. This is because when parents visit their sick child, they usually allow siblings to accompany them. The situation is further worsened by the fact that siblings share the same hereditary and environmental factors. Instances, where the disease is not communicable, siblings may experience feelings of fear and anxiety of contracting the disease during visits when the situation is not explained to the conclusively by their parents and nurses.

There are strong emotional foundations that members build by the virtue that they share in their moments of grief and happiness (Giallo & Gavidia-Payne, 2006). Therefore, when a member of the family becomes ill, it becomes the responsibilities of all family members to gather all their emotional strength in support of the ill member. The situation places stress upon the foundation and it is important that all family members understand that things will have to be change. Siblings are bound to respond differently to an ill child and various factors have been identified as contributory. These factors include age and sex. For instance, during adolescent when children are already experiencing hormonal fluctuations and dealing with emotional conflicts, it is unlikely that they will participate actively. The participation by siblings may occur in various aspects and various behaviours may be observed. The constructive behaviours include; being worried of the condition of the ill child, sharing in sorrow with other family members and the ill child, providing assistance to the ill child and to other family members, finding information on the condition and sharing it with other members, showing maturity in dealing with the situation, and showing responsibility being obedient to the parents (Johansson, Fridlund & Hildingh, 2004). Destructive behaviours that may be adopted by the siblings include; anger projected at the ill child, complaining of lack of attention from the parents because much attention has been directed to the ill child, getting overtly anxious about losing the ill child or the family being disintegrated, being emotionally destabilized and as documented siblings may also revert to increased appetite as a way of responding to the situation (Johansson, Fridlund & Hildingh, 2004).

Relationships between Siblings
Critical illness of a child affects all members of the family, including well brothers and sisters. Stress in siblings lives results from changes in parental behaviors, care giving arrangements, and family relationships (Barlow & Ellard, 2006). These changes, along with limited understanding and information about the crisis, create feelings of confusion, loneliness, jealousy, and sadness, as well as physical symptoms and behaviour changes. They may also notice increased moodiness, behaviour changes and school difficulties.

When a child in the hospital, everyone is affected, especially brothers and sisters. Children who are hospitalised often receive more attention, special treatment and gifts. Brothers and sisters can experience many feelings as they try to understand and deal with the change in family life and routines (Young, 2007).

It's normal for healthy siblings to undergo the following reactions:

- Worry that his/her sister or brother will die.
- Fear that they or other loved ones will catch the sibling's disease
- Feel guilty because they are healthy and can enjoy activities that the sibling cannot
- Be angry because parents are devoting most of their time and energy to the sick sibling
- Feel neglected and worried that no one in the family cares
- Resent the sibling who never has to do chores
- Resent that the family has less money to spend now because the sibling is sick
- Be nostalgic for the past (wishing things could be like they were before the illness)
- Feel residual guilt for being "mean" to the sibling in the past
- Experience generalized worry and anxiety about an uncertain future

The way siblings express their needs will vary considerably; some may act out, some may try be the perfect child, and many will do both. Most studies find that siblings of children with cancer are not at any increased risk for mental illness, although they may be at greater risk for behavioural and emotional manifestations of their distress (Huizinga et. al, 2005).

Factors Influencing Coping with Hospitalisation

Factors Influencing Response by Parents

Nature of the Illness
Different illnesses present different challenges and require varied level of emotional and physical care by parents. Some illnesses limit the level which the child and the parent can interact and will therefore has an effect on the relationship between the two. For instance, some chronic illnesses may limit the contact that the child can have with the parent due to reduced immune capacity, which places the child at risk. According to Rutter and Taylor (2002), any condition that severs or reduces the relationship between the parent and the child may place the esteem of the parent at risk. For example, some conditions place challenges on the mother during breast feeding while other may lead to pain by the child when close contact s established. The nature of the disease may also determine the parents' response because some chronic diseases are well documented and researched and the parent may already be aware of the challenges that they may encounter when providing care. However, other diseases are not well documented and the parents may constantly need to consult doctors with regard to the progress and the medication. Such situation may cause the parents to be anxious and uncertain. In addition, different conditions may require different levels of physical, social and emotional support. Illnesses that incapacitate the child will require much physical support than an illness that predisposes the child to social stigma such as mental illness (Ramritu & Croft, 2009).

Age of the Child
The age of the child is important in the sense that children at different ages exhibit varied levels of dependency when they are chronically ill. Furthermore, the children may also have different levels of understanding for their condition. A chronically ill child of 12 years may have the capacity to control bowel movement and may therefore not require the parents to continually change them. However, a 2 year old child with the same condition will not have control and therefore the parents will be constantly required to change the child in the case where the children are being taken care of at home. Furthermore, as outlined by Hardy and Prior (2001), attachment of children with their parents reduced by an increase in the child age. Therefore, younger children who

are more attached to their parents will require more attention than older children who are comparatively less attached.

Gender of the Parent

As outlined by Kristofferszon, Lofmark and Carlsson (2005), mothers and fathers of chronically ill children respond differently to the condition of their child. The differences come in terms of the coping mechanisms they adopt, their perception of the disease and the social support they are bound to seek.

Extent of Participation

Giallo and Gavidia-Payne (2006) emphasize on the participation of parents during the hospitalisation of their chronically ill child, as a way of alleviating anxiety in both the child and the parents. The participation ensures that care givers have the opportunity of discussing the condition of child continuously and therefore the parents will have a greater understanding of the condition of their child. Furthermore, parents will be conversant of the medication, the procedures and other activities done by caregivers and will be therefore less prone to anxiety. For the parents whose participation is limited, anxiety is usually caused by the diminishing level of understanding of the efforts of the health care and of the illness.

Number of Children

The number of children the parents will have to take care of is also determines the pressure that will be placed upon the parents and subsequently the response (Giallo & Gavidia-Payne, 2006). This correlation is drawn from the fact that level of response is affected by the extent to which the ill child requires care by parents. When there are other children to take care, pressure will be increasing with increase in the number of children.

Factors Influencing Response by Siblings

Nature of Illness

The nature of the chronic illness determines the response of the siblings to the situations pertaining to the illness (Stoneman, 2005). Some diseases are more prone to stigmatization and siblings may have a much difficult time accepting the condition of their brother or sister. Furthermore, varied illnesses disrupt the normal routines of families to different degrees.

Age of the Siblings

Children develop understanding of situations as they grow older. Therefore, age is an important factor determining the way children respond to different challenging circumstances. Studies have identified adolescents as contributing the least towards the care of a critically ill brother or sister (Hardy & Prior, 2001). During the adolescent age, children are already dealing with varied emotions due to hormonal changes and this may affect how they respond. Temperament of a sibling determines to a greater degree how he/she will respond to the illness of a brother or a sister and the reduced parental attention. In essence each child will respond differently to the various circumstances that emanate when their brother or sister has been hospitalised. Some of them will respond very positively when called upon to offer assistance to the ill child but will not take it very well when the parents concentrate most of their attention to the ill child (Stoneman, 2005).

Coping Mechanisms

As explained by Kiernan, Guerin and MacLachlan (2005) and Koopman et al. (2004), during the periods of extensive emotional stress, individuals are prone to developing psychological and even physiological complications. It is therefore important that health care providers strive to ensure that parents adopt healthy coping mechanisms that encourage positive behaviour by the siblings. Furthermore, the siblings can also be educated and encouraged to develop a more positive approach during hospitalization of their brother or sister.

Due to the extensive researches that have been documented concerning the response of siblings and parents of children who are chronically ill, it is obvious that coping mechanisms have been documented. However, one important realization is that health care providers are the major driving force towards the awareness of holistic care for parents and siblings (Koopman et. al, 2004). Health care providers are already conversant with various medical conditions and may anticipate the kind of response adopted by parents and siblings. It is therefore upon health care providers to extend their services to parents and siblings aimed at equipping them with behavioural approach when responding to the circumstances presented when a child is chronically ill. Furthermore, the lack of experience by parents and siblings require nurses to identify the possibility of destructive behaviours and recommend treatment (Lam, Chang & Morrissey, 2006).

Working hand in hand with care givers has been identified as one of the important mechanisms that may help the parents deal with the condition of their child (Lam, Chang & Morrissey, 2006). Therefore, it is proposed that parent adopt a close contact with care givers. Getting adequate information from care givers relating to the progress of the child is also important and this is usually obtained when the parents work together with care givers. In most instances, parents who develop anxiety due to the condition of their child do so because they adopt a negative approach towards the care givers. The negative approach is usually nurtured by a prolonged period of misinformation or lack of information. The parents are therefore subjected to speculation which emanates to anxiety and uncertainty (Mitchell, 2004; Ramritu & Croft, 2009).

Parents are also coping with the situation by seeking of support services from various quarters. According to Ramritu and Croft (2009), the sources of support as revealed by parents were spouse, other family members, the church and other parents undergoing the same challenging moments. Other sources of support also included literature that has documented information concerning the condition of the child. A significant number of parents also revealed that they seek for sought professional help (Lindblad, Rasmussen & Sandman, 2005).

Coping mechanisms of children mostly relate to how the specific condition has affected the family in general. In a study conducted by Appleton and Hames (2009), on the perception of siblings of a child with epilepsy, it was realized that most children perceived and responded to the condition positively. However, the research also revealed that very few of the siblings who perceived and responded to the condition negatively were willing to participate in the research. Siblings first responded by protesting to the apparent concentration of the parents on the condition of the ill child, secondly the siblings resort to withdrawal and finally to total detachment.

According to Cullen and Barlow (2004), parents should be encouraged to enrol in training and support programme. They realized that parents who enrolled in training programmes had the capacity to manage well children with various forms of disability.

Although disability is just one aspect that can lead to hospitalisation, the challenges faced by parents are roughly similar in terms of the extent of care required. The increase in confidence during care giving reduces parental anxiety and therefore the parent is able to manage the situation effectively. This will ensure that the parent has the time, energy and mental capacity to address the concerns of the siblings of the sick child effectively.

Interventions and Recommendations

In most instances, parents and siblings of the chronically ill child are inexperienced and are completely unaware of what to expect and how to respond. It is therefore upon the health care provider to anticipate the challenges that might be experienced by parents and siblings, and offer specialized advice. It is also important that nurses offer information that would be beneficial to parents and siblings instead of waiting to be asked. This not only demonstrates holistic care but also gives the parents and siblings with confidence in the care provided.

Parents on the other hand are required to work together with health care providers in terms of seeking clarification on the child's illness. Furthermore, they should also seek advice on how to respond positively to the situation and even offer assistance to the other siblings. In addition, they should look for professional help when they feel that the situation might get out of hand (Lam, Chang & Morrissey, 2006).

Health care providers need to take such factors into account when providing services to families with a chronically ill child. This is because some of these factors may have negative effects on the well being of the child. Furthermore, an approach that also cares for the needs and concerns of the siblings is more holistic.

With regard to the findings of a research conducted by Kiernan, Guerin and MacLachlan (2005), the importance of letting children encourage one another cannot be overemphasized. The research sought to identify the recommendations of children during their stay in a hospital. The concerns of most children were that during hospitalisation they would not be able to do the interesting things that they used to do. Extrapolating these findings to the siblings of hospitalised children, implies that among their fears is being deprived of the time to undertake interesting activities, either because their parents are busy taking care of the sick child or because everybody is so sad to engage in any activity. Siblings of hospitalised children should therefore be allowed time for play. For instance, a health institution can organize outdoor activities for siblings of hospitalized children as a way of creating the platform where they can share their fears and concerns. Such an initiative can relieve the parents of a significant load while at the same time being therapeutic for the siblings. Furthermore, the nurses and the health care institution can also seek for the views of siblings of hospitalised children on ways in which both the parents and the hospital can ensure that they are psychologically and physiologically healthy (Cohen et. al, 2008).

This research has established that environment play a very key role on how siblings of hospitalised child respond to the situation. According to Aujoulat et al. (2006), it was recommended that the health care facility where a child is hospitalised has the responsibility of ensuring that the environment is sensitive to siblings of all developmental stages. Such an environment should include playrooms where siblings can play during visits. This will help the parents manage the siblings and the sick child more effectively (Brannon & Feist, 2009).

Finally, it is important for the siblings to be granted consideration when dealing with the challenges facing the parents. In most instances; care givers assume that siblings are not affected and when they are the parents can easily handle they problems. However, the findings of this study indicate that the siblings may even suffer more in silence. With regard to their developmental stages and their level of understanding, Nurses may involve the siblings by addressing their concerns with regard to the illness, shedding more light concerning the illness and perhaps explaining to them the psychological situation faced by their parents. In return siblings will develop greater understanding and will even offer each other comfort in addition to offering comfort to parents (Koopman et. al, 2004). (See Appendix 1)

Conclusion

Parents should take more responsibility to have a close monitoring of their hospitalised child and also at the same time should maintain the balance between siblings, so that the bonds between siblings remains in a healthy manner and there won't be any negative changes or reactions in the siblings of hospitalised child . They should also obtain that siblings must involve in caring of their hospitalised child where ever possible and maintain good environment between them. It is only natural for parents of hospitalised children to want to be actively involved in activities aimed at ensuring the well being of their children. A family is the basic unit of every society and it provides persons members with the sense of comfort and belonging and identity. Extensive literature has covered the psychological effects experienced by the hospitalised child, but the effect of hospitalisation of one child has on the parents and the siblings have not been well recognized. However, it is well documented that the role played by parents of children in paediatric care is significant for the psychological and emotional well being of the children. In addition, parental involvement has also been identified to be beneficial to the parents. Children perceive illnesses differently and it is important that this aspect is taken into consideration when seeking ways to help the parents address the needs of siblings of a hospitalised child. Siblings are also affected when their brother or sister has been hospitalised or is revering from a chronic illness. Children are the mostly ignored when providing health care. In most instances, the welfare of children is usually left aside and only the parents are considered. However, this project has revealed that children also experience physical and other emotional challenges. Therefore, it is important that the health care facility take care of the chronically ill child, address the needs of parents, and keep into consideration the needs of siblings as well. This will ensure that health care to the ill child and the family is provided in a holistic manner. This report strives to identify the relationship between hospitalised children and their parents and siblings, and to critically review the literature in relation to the environment and the process of hospitalisation on the siblings' psychological and physiological health, their behaviours and attitudes, and responses to illness of the brothers or sisters.

Appendix 1

Meet Siblings Needs

- Recognize that illness and hospitalization affects the whole family in different ways.
- Remember that honest and ongoing communication helps children understand the events or situation affecting their family.
- Reassure siblings that they most likely will not also become sick or injured.
- Continue daily routines as much as possible. Children do better keeping their usual schedules and rules for home, school and other activities.
- It's the little things that count. Help children feel valued, loved and remembered as an important part of their family, whether you are in the hospital or at home.

Communicating With Children

- Give them information they can understand.
- Talk to them about how they feel about their brother or sister being in the hospital.
- Discuss their concerns about visiting the hospital.
- Acknowledge how hard the situation is and let them know you appreciate their efforts.
- Keep your kids connected.

Ways to do this include:

- Call or write emails
- Share drawing or photos
- Make videos or voice recordings of stories, songs or messages
- Create and exchange CDs of favourite music
- Make a get-well banner

(continued next page)

School & Community Support

When you are not able to be with your other children, arrange for a caring adult such as; grandparent, neighbour or friend, to spend time with them.

Choose someone at your children's school, like a teacher, counsellor or coach, to help support them during this time.

Let others help your family by running errands, making meals or driving carpools. This may allow you more free time to spend with all of your children.

Helping Siblings Feel Included

During the hospitalisation, siblings can participate in activities at home, while visiting my let them feel more included.

Home Activities

- Choose photographs of family, friends, favourite trips or any other familiar objects to bring to the hospital to decorate their brother or sister's room.
- Create artwork for their brother or sister's hospital room.
- Help pick their brother or sister's favourite things to send to the hospital such as; stuffed animals, clothes, movies or pictures.
- Write letters and cards to keep their brother and sister informed about news at home or at school.
- Design a door sign with their brother or sister's name and messages for visitors.
- Record favourite songs, stories, jokes and greetings to send to the hospital. Voices of familiar people can be comforting.
- Put together care packages to send to the hospital. They can include notes, drawings, gifts or pictures from home

Hospital Activities

- Invite siblings to visit whenever possible and appropriate.
- Prepare siblings for what they will see and hear. If their brother or sister's behaviour and appearance are different than normal, describe how their brother or sister may look or act. Child life specialists can help provide support for visits.
- Encourage siblings to visit the Child Life Department's Activity Rooms such as; the Playroom, - - School Room, All-Stars Technology Room and Teen Lounge. They can attend with their brother or sister, or visit on their own if appropriate.
- Create opportunities for siblings to engage with their brother or sister if appropriate. They can create art projects together, read books, attend programming and play together.
- Introduce siblings to familiar figures in the hospital who are involved with their brother or sister's care. These may include doctors, nurses and child life specialists.

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A survey of Knowledge, Attitude and Practices of persons bitten by suspected rabid animals

ABSTRACT

Background: Rabies is associated with high case fatality rate and is reported in Iran, especially in the North, North-West, and North-East provinces.

Objective: The survey was carried out to assess the general knowledge, attitudes, and practices (KAP) of subjects who had been bitten by a suspected rabid animal, about rabies, during 2007-2008.

Methods: One-hundred and two subjects bitten by a suspected rabid animal and who were admitted to the Pasteur Institute of Iran, completed the questionnaire.

Results: In assessing the knowledge, 64.7% of participants hadgood knowledge , 21.5% poor and 13.7% had very good knowledge about rabies. In assessing the attitudes toward rabies, most of the cases had a good attitude (74.5%) and 12.8% had a poor attitude and 12.7% had an acceptable attitude. For practices, 75 out of 102 subjects performed washing the bite site with soap and water, versus 25 (25.5%) subjects did not.

Conclusion: General knowledge, attitudes, and practices of participants were adequate in this study. More public awareness about prevention and prompt post exposure treatment is needed.

Keywords: Rabies, Knowledge, Attitudes, Practices, Assessment, Iran

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Introduction

Rabies is an acute fatal infection. Rabies is a fatal neurological pathogen that is a persistent problem throughout the developing world where it is spread primarily by domestic dogs (1). Every year at least 55,000 people die from rabies and more than 7 million are treated for exposure to the virus (2). More than 99% of these deaths occur in the developing world where the disease is a much greater problem, chiefly because rabies is endemic in domestic dog populations (3). Rabies is a preventable zoonotic disease (4). The etiologic agents are neurotropic RNA viruses belonging to the Family Rhabdoviridae, Genus Lyssavirus (5).

In Iran, rabies has been reported in all provinces especially in North, North-West, and North-East of the country and has a significant role in economic loss and social disruption (6). According to a study in Tehran Province, the offending animals were dogs 65.9%, cats 25.44%, squirrels 3.89%, monkeys 1.52%, hamsters 1.41%, and other animals in 1.84% of cases. Bites were most frequent among the 20 - 29 years old age group (30.1%), followed by >40 (26.9%), 10 - 19 (19.9%), and 30 - 39 years (14.7%). Those aged <9 years had the least frequency of animal bite (8.4%) (7).

The objective of this survey is assessing the general knowledge, attitudes, and practices about rabies by the people who has been exposed directly to a suspected rabid animal.

Patients and Methods

This survey has been carried out on 102 persons who had been bitten by a suspected rabid animal and admitted to the Institute Pasteur of Iran during 2007-2008. We prepared a questionnaire for each participant who agreed to complete it and on the first part included the demographic information and past previews of their rabies exposure and also questioned about having home pets. On the second part, there were questions assessing the general knowledge and rabies prevention, - is rabies treatable, about the nature of rabies, and duration of immunity. On the third part the questions were targeted to determine the attitudes towards rabies by asking participants do they recognize rabies signs and symptoms in rabid animals and humans. On the last part, practices regarding rabies were evaluated and questioned about wound suture, referring to rabies care center after exposure, cleaning the wound and how they were admitted after exposure to the institute and whether they were able to guide others about prevention and treatment of rabies.

Statistical analysis

One score to correct answers and no score to incorrect answers was designated. Proportions were compared by chi-square tests, and differences were regarded to be significant at P value <0.05. For data analysis, the Statistical Package for Social Sciences, version 16 (SPSS Inc) was applied.

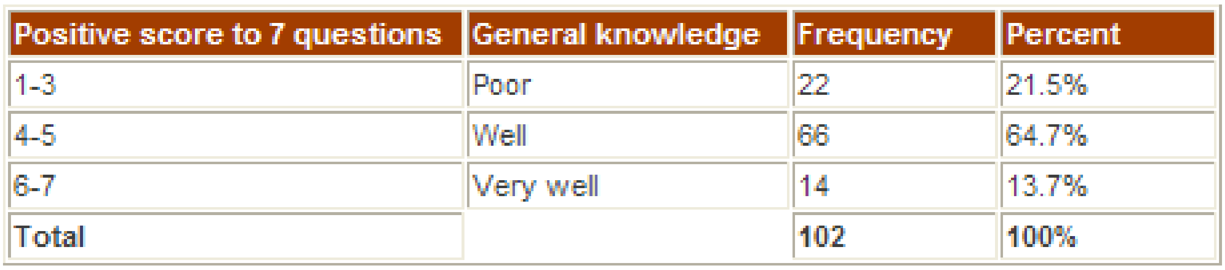
Results

Of 102 participants, 36 cases were female and 66 cases were male (35% female, 65% male). The mean age of participants was 31.4 years with a minimum of 12 and a maximum of 76 years of age, and most of the cases were between 20 to 30 years of age. 81% of participants had no previous bite compared to 18% with such an experience, while only 10% of the patients had a history of previous rabies vaccination and Rabies immune globulin (RIG). 31% of participants had home pets.

Suspected rabid animal of exposure in the studied population were: dog 48 (47.1%), cat 42 (41.2%), hamsters 5 (4.9%), squirrel 2 (2%), horse 1(1%), monkey 1 (1%). In 3 (2.9%) of cases the suspected rabid animal was unknown.

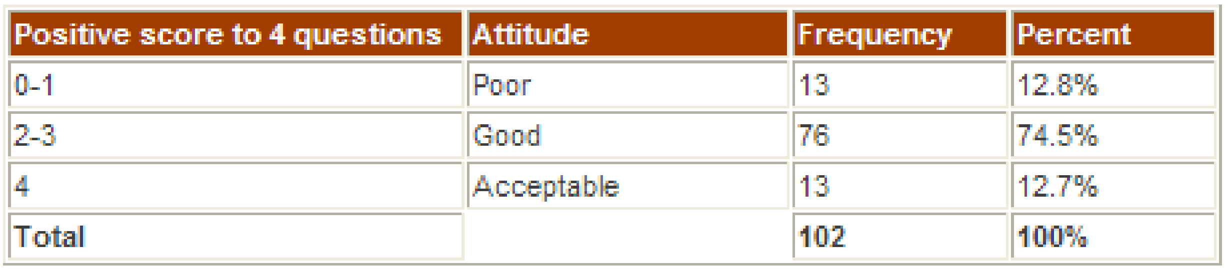
In assessment of knowledge: 91.2% of participants believed that rabies is a preventable disease and 52.9% thought rabies is treatable. 65.7% of participants had a correct answer about the golden time for prevention after exposure. 33.3% of participants had no idea that rabies is a virus, and 88.2% had no idea or a wrong idea about the duration of immunity caused by rabies vaccine. 13.7% of subjects had very good, 64.7% good, and 21.5% had poor general knowledge. Table 1 shows the knowledge of participants about rabies in the studied population.

In assessment of attitudes toward rabies: 36.3% of participants were wrong about suturing the wound, and 70.6% had enough information about signs of rabies in a rabid animal. 75.5% of participants had no idea about rabies signs and symptoms in humans and 90.2% said they should be referred to a rabies care center.



Positive score to 7 questions	General knowledge	Frequency	Percent
1-3	Poor	22	21.5%
4-5	Well	66	64.7%
6-7	Very well	14	13.7%
Total		**102**	**100%**

Table 1: The knowledge of participants about rabies in the studied population



Positive score to 4 questions	Attitude	Frequency	Percent
0-1	Poor	13	12.8%
2-3	Good	76	74.5%
4	Acceptable	13	12.7%
Total		**102**	**100%**

Table 2: The attitude of participants about rabies in the studied population

Most of the cases had a good attitude (74.5%), 12.8% had a poor attitude and 12.7% had an acceptable attitude. Table 2 shows the attitude of participants about rabies, in the studied population.

In assessing the practices, 75 of 102 (76.5%) subjects performed washing the bite site with soap and water, versus 25 (25.5%) subjects who did not. Forty-two subjects (42.8%) were referred to Pasteur institute by health care personnel, 28 cases (28.5%) were aware of visiting by themselves, and the rest by their friends and families.

All subjects except 7 (7.1%), believed data regarding necessity of serum and vaccine registration by personnel of Pasteur institute was sufficient. All cases except 6 (6.1%), believed after training by personnel of Pasteur institute, they found the capability to recommend others about rabies post exposure treatment.

By chi-square test, association between the history of previous bite and knowing rabies signs in animal was significant (P value: 0.45). Also association between previous bite and practice of transfer of pet home for visit was significant (P value: 0.028).

Discussion

Rabies is endemic in Iran. It is the most important zoonotic disease in the country. Based on studies undertaken during the past few decades, there is evidence that the main reservoir for rabies is wolves. The incidence of rabies in humans and animals is increasing each year. In 2006, more than 130,000 people received post-exposure prophylaxis. Similar figures apply regarding preventive vaccination in animals. Official data suggests that the majority of human exposures are due to biting episodes caused by dogs. However, investigations performed by this team showed that in many cases wolves were responsible for rabies transmission to humans (8). According to the present study, dogs were the most suspected rabid animal that exposed the studied subjects to rabies post-exposure treatment. Domestic dogs are the principal reservoir of rabies throughout most of Africa and Asia (9). Dogs and cats still are our most exposed animal subjects at risk of rabies and concern must be focused on collecting or vaccinating these animals.

In assessing knowledge, attitudes, and practices about animal bites and rabies in the general community, in a study of 1129 persons in India, only 360 (31.9%) of people felt that washing the wound with soap and water was the best option. Application of indigenous products like chillies (11.4%), turmeric (5.6%), lime (6.8%), kerosene oil (2.3%), herbal paste (4.2%) was suggested along with a visit to an occult medicine practitioner (1.5%) as part of the bite wound management. People were not aware of the number of injections needed for treatment of animal bites (10). Every year, millions of people travel to countries where rabies is enzootic. In a study of 496 German physicians and pharmacists who completed the questionnaire for evaluating the quality of rabies-specific information provided by travel health advisors and the extent of their knowledge about pre and post exposure prophylaxis, almost all respondents indicated that they would mention the risk of rabies and appropriate preventive measures to long-term travelers and tourists planning to visit rural areas (11). With the establishment of rabies as a disease that is endemic among wildlife species in North Carolina, educational efforts directed at a subpopulation of residents potentially at high risk of rabies virus infection would have public health benefits (12). In a cross-sectional study of a rural community, the dog bite rate was 25.7/1000 population per year. The rate for males was higher than for females; half of the bites were in summer; 40% did not go for any prophylaxis. Most knew that injections were available to prevent rabies. Only half said they would visit a hospital for treatment (13).

As other studies in Iran the most common range of age affected by the rabid animal was 20-29 years as in the present study. In our study, knowledge, attitude and practices were good. However, many of the subjects were living in Tehran where referring is much easier there. Nearly half of them (42%) were referred by health care personnel who may have been informed somehow by health providers before post-exposure treatment. Both media and training at schools has important roles to educate the people in our country.

More than 29,000 human deaths were reported in 2006 in Far East Asia, representing more than 50% of all human rabies cases around the globe. Although there are many factors that contribute to the epidemic or endemic nature of rabies in these countries, the single most important factor is the failure to immunize domestic dogs, which transmit rabies to humans. Dog vaccination is at or below 5% in many of these countries, and cannot stop the transmission of rabies from dogs to dogs, thus to humans. It is thus most important for these countries to initiate mass vaccination campaigns in dog populations in order to stop the occurrence of human rabies in Far East Asia (14). The development of integrated control measures involving public health, veterinary, wildlife conservation and animal welfare agencies is needed to ensure that control of canine diseases becomes a reality in Africa and Asia (9).

Conclusion

Despite adequate general knowledge, attitudes, and practices of participants in this study, more awareness about prevention and prompt post exposure treatment is needed. Regarding number of bitten cases, there was not any case of rabies after receiving post exposure treatment in our center. Rabies prevention education especially in rural areas may decrease the financial burden of vaccines and consequences of infection.

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Opinion and practice of gloving among nurses in a University Teaching Hospital

ABSTRACT

Background: Proper gloving handling can decrease infections in hospital settings. Lack of knowledge amongst healthcare providers can transmit micro-organisms that are responsible for hospital acquired infections.

Aims: Assess opinion about glove handling and practice in routine patient care.

Materials and Methods: Nurses working in Gulf Medical College Hospital and Research Centre, Ajman, United Arab Emirates participated in this cross sectional study. Structured, open-ended, self administered, piloted questionnaire was used. Chi-square test was used to find the association.

Results: Nurses' ages ranged from 19 to 48 years. Mean (SD) duration of clinical experience was 6.61 (4.19) years. 70 (70.7%) would use gloves only on contact with blood and body fluids; 16 (16.2%) said they would use it only on contact with patient skin and only one nurse (1%) mentioned using gloves only while handling sharps.

Conclusion: There is need to motivate nurses to adhere to gloving practices by providing in-service training programs.

Key words: Nurses, Gloving, Opinion, Practice

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Introduction

Gloving is one of the most important factors in preventing the spread of infection and development of antibiotic resistance in healthcare settings [1]. Proper glove handling decreases the occurrence of infections in hospital settings and lack of knowledge amongst healthcare providers can transmit micro-organisms that are responsible for hospital acquired infections. The standard precautions should be followed for each patient care in order to protect health care providers and patients from risks associated with contact with blood and other biological liquids. As delivery of medical care moves increasingly to an outpatient setting, patients who require hospitalization have more acute illnesses and heightened susceptibility to nosocomial infections. These infections form a major challenge in the medical field. On an average nosocomial infection complicates 7% to 10% of hospital admissions [2]. Universal precautions involving the use of gloves, can reduce the risk of exposure of the health care worker's skin or mucous membranes to potentially infective materials, hence effective glove handling is one of the most important measures for preventing and controlling such infections [3]. Proper gloving of hands is an effective prophylactic disinfection that can prevent nosocomial infections, particularly in high risk areas of the hospital like the intensive care units. Despite this, compliance with glove handling amongst health care workers, including physicians and nurses, remains under 50%, which is unacceptably low. [4-6]. Educational programs to improve hand washing by health care providers by increasing their awareness about nosocomial infection have had limited success [1]. The present study was conducted to assess the opinion of gloving of hands during routine patient care and to determine the situation of nurses' hand gloving practice.

Methods

This cross sectional study was conducted among the nurses involved in virtually every aspect of nursing duties in Gulf Medical College Hospital and Research Centre, Ajman, United Arab Emirates (UAE) from February to May 2009. A structured, open-ended, self administered, pilot tested questionnaire was used to assess the opinion of nurses on glove wearing/handling and determine the practice among nurses. Informed consent was obtained from the participants before administering the questionnaire. Anonymity was maintained, a structured open-ended questionnaire on which the nurses were asked not to enter their names or any other information that could reveal their identity. The questionnaire contained questions on their opinion and factors related to glove wearing in addition to socio-demographic information. The data from the questionnaire were coded and entered into an Excel spreadsheet and analysis done using PASW 17. Chi-square test was used to compare parametric variables and mean (sd) to get the average for the same. p value of < 0.05 was considered statistically significant.

Results

A total of 101 nurses at the Gulf Medical College Hospital and Research Centre, Ajman, UAE were surveyed with a response rate of 99%. All nurses participated in this study, which included 11 males and 90 females. The nurses' ages ranged from 19 to 48 years. The mean (sd) age of the respondent was 29.59 (5.96) years. Work experience of the nurses varied between 10 months and 22 years. Mean (sd) duration of clinical experience was 6.61 (4.19) years. 51.5% had less than 5 years of clinical work experience, 32.7% had 5 to 10 years experiences and only 15.8% had more than 10 years of clinical work experience. Details are in Table 1.

In the present study, when nurses were asked if they think that it is important to wear gloves, 100 out of 101 (99%) nurses responded, and of the 100, all (100%) responded in the affirmative.

99 nurses responded when asked about their opinion towards usage of gloves in three different situations namely: when in contact with patients' skin, blood and body fluids and when using sharps (syringes). This reflected their awareness about the need to use gloves in these situations and does not necessarily reflect their actual practice. Two nurses had not responded to this question. Among the 99 nurses, 70 (70.7%) would use gloves only on contact with blood and body fluids; 16 (16.2%) said they would use it only on contact with patient skin and only one nurse (1%) mentioned about using gloves only while handling sharps. In summary, these nurses used gloves in one situation only. There were 4 nurses (4%) who preferred wearing gloves when in contact with blood and body fluids and patient skin, 2 (2%) nurses used gloves when in contact with patient skin and sharps and only six nurses (6.1%) out of 99 thought of wearing gloves in all three situations.

Opinion regarding glove use and years of work experience was further analysed and it was found that among nurses who opined that they would use gloves only on contact with blood and body fluids, 74.5% were with experience less than 5 years, 71.9% were with work experience 5 to 10 years and 56.3% had duration of work experience more than 10 years.

Among nurses who opined that they would use gloves on contact with patient's skin, 17.6% were with work experience less than 5 years, 15.6% had 5 to 10 years of work experience and 12.4% had more than 10 years of work experience.

The nurse who opined that she/he would use gloves while handling sharps had experience for more than 10 years.

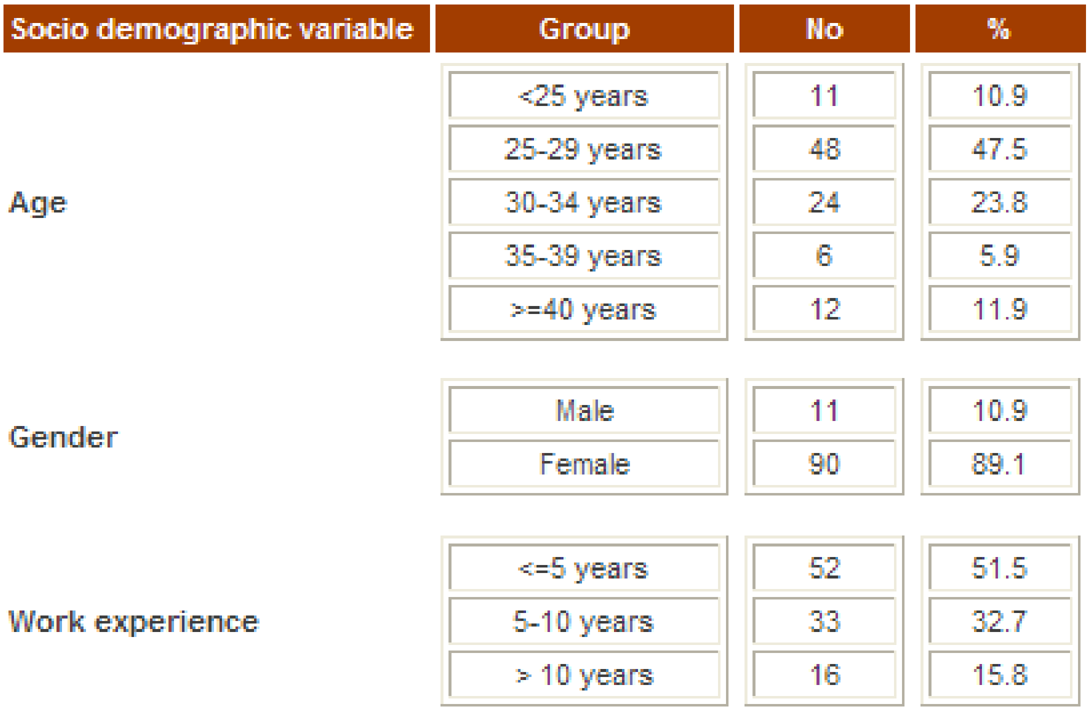
Four nurses opined that they would use gloves on contact with blood and body fluids and contact with patient's skin, 6.3% each had experience for 5 to 10 years and more than 10 years respectively. 2.0% had experience for less than 5 years.

Among nurses who opined that they would use gloves during contact with patient's skin and while handling sharps, 6.3% were with work experience more than 10 years and 3.1% had 5 to 10 years of work experience.

To analyze whether opinions regarding use of gloves always in all the three situations was influenced by years of work experience, we found that 3 nurses (5.9%) had < 5 years work experience, 1 nurse (3.1%) had between 5 to 10 years work experience and 2 had work experience more than 10 years and were using gloves in all three situations. Details are given in Table 2.

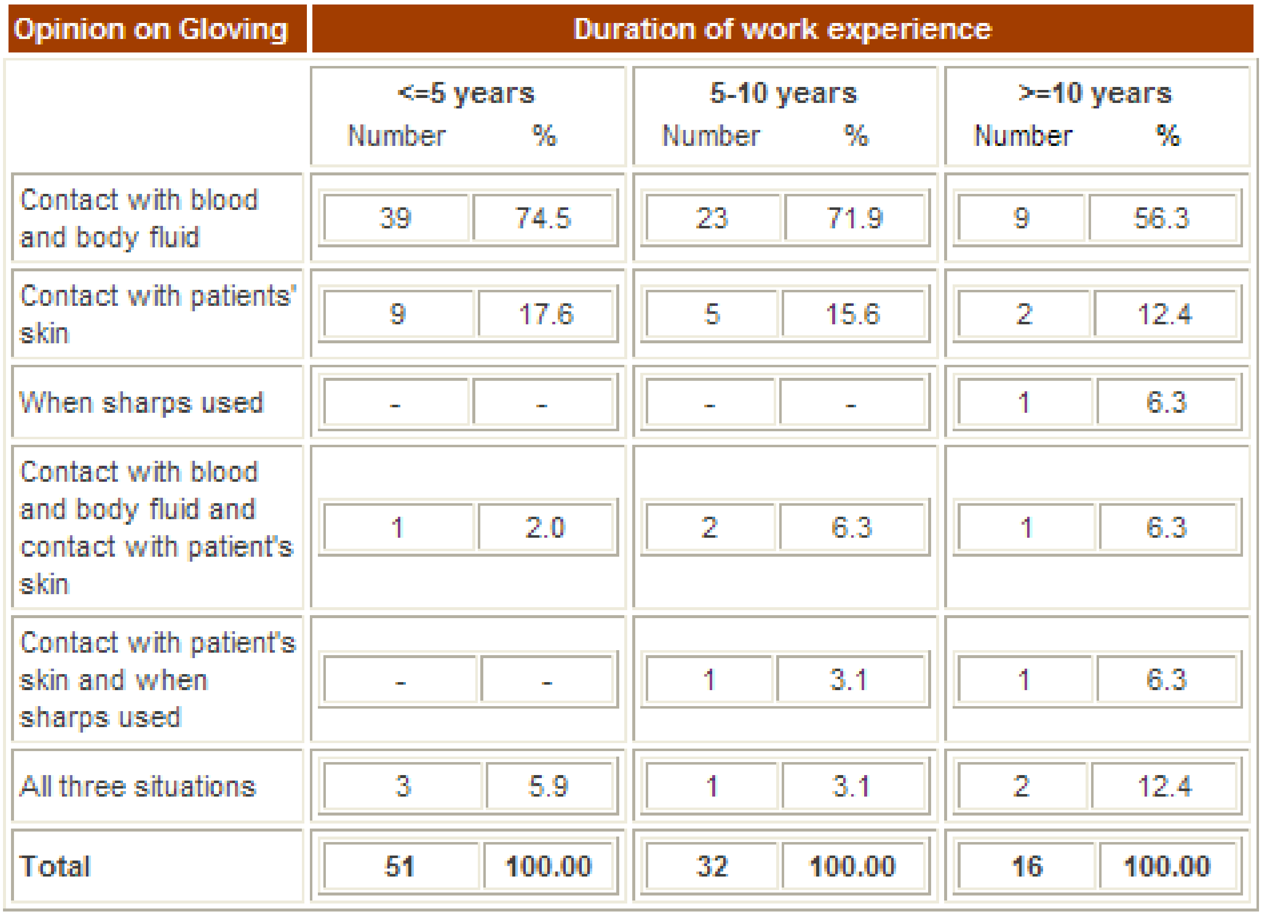
Of the nurses who did not respond to this knowledge-based question, on analysis it was found that one used to wear gloves in all three situations in actual practice and the other nurse used to wear gloves occasionally in contact with patient skin but always in contact with blood and body fluids and sharps (syringes).

On further analysis of the responses of 6 nurses who thought of using gloves in all three situations, whether they practiced what they knew, it was found that 4 did practice using gloves in all three situations; one nurse used gloves always when in contact



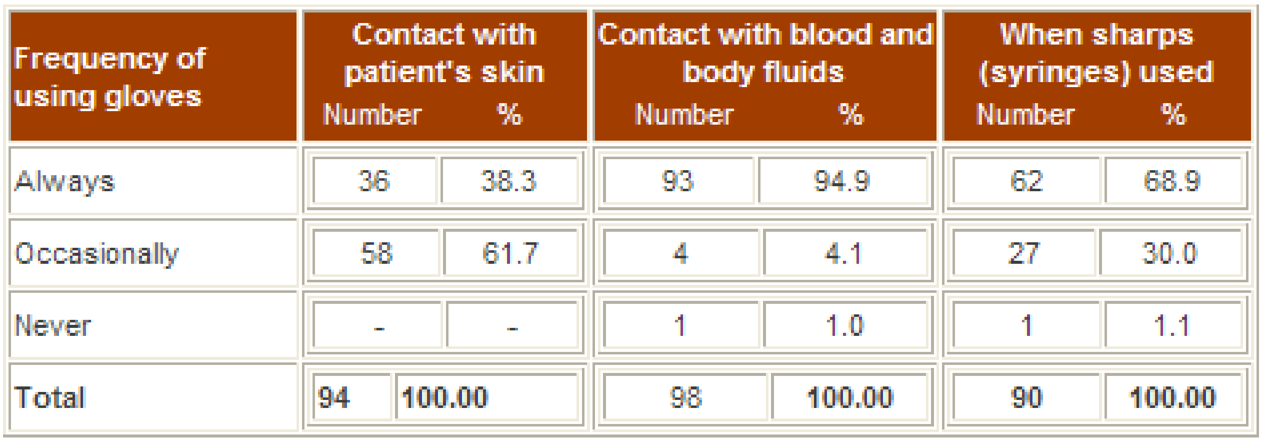
Socio demographic variable	Group	No	%
Age	<25 years	11	10.9
	25-29 years	48	47.5
	30-34 years	24	23.8
	35-39 years	6	5.9
	>=40 years	12	11.9
Gender	Male	11	10.9
	Female	90	89.1
Work experience	<=5 years	52	51.5
	5-10 years	33	32.7
	> 10 years	16	15.8

Table 1: Socio-demographic characteristics of the participants



Opinion on Gloving	Duration of work experience					
	<=5 years		5-10 years		>=10 years	
	Number	%	Number	%	Number	%
Contact with blood and body fluid	39	74.5	23	71.9	9	56.3
Contact with patients' skin	9	17.6	5	15.6	2	12.4
When sharps used	-	-	-	-	1	6.3
Contact with blood and body fluid and contact with patient's skin	1	2.0	2	6.3	1	6.3
Contact with patient's skin and when sharps used	-	-	1	3.1	1	6.3
All three situations	3	5.9	1	3.1	2	12.4
Total	**51**	**100.00**	**32**	**100.00**	**16**	**100.00**

Table 2: Distribution of participants according to duration of work experience and opinion on gloving



Frequency of using gloves	Contact with patient's skin		Contact with blood and body fluids		When sharps (syringes) used	
	Number	%	Number	%	Number	%
Always	36	38.3	93	94.9	62	68.9
Occasionally	58	61.7	4	4.1	27	30.0
Never	-	-	1	1.0	1	1.1
Total	94	100.00	98	100.00	90	100.00

Table 3: Distribution of participants glove use according to situation

with blood and body fluids but occasionally in the other two situations and one always used gloves during contact with sharps and blood and body fluids but only occasionally used when in contact with patients' skin. These 6 nurses were also found to change gloves, one for each patient.

With regard to the question about how often they used gloves in the three situations mentioned above, reflecting their actual day to day practice, we got a response rate of 87%. 13 did not respond to this question. We found that of the 88 nurses who did respond, 29 nurses (33%) said that they always used gloves and 59 nurses (67%) said they used gloves only occasionally in all three situations.

Of the 29 nurses who always used gloves in all three situations, 28 nurses (96.6%) changed gloves one for each patient and one nurse did not respond to a question on frequency of changing gloves.

94 out of the total 101 nurses responded for the practice of use of gloves when in contact with patients' skin. 38.3% wore them always during contact with patient's skin and 58 (61.7%) used them only occasionally. The response rate for the question reflecting practice of use of gloves during contact with blood and body fluids was 97%; 3 did not respond to this question. 93 out of the remaining 98 or 94.9% of nurses always used gloves when in contact with blood and body fluids and only 4 nurses (4.1%) used gloves occasionally and one nurse said she never used gloves in this situation. Regarding practice of wearing gloves when sharps (syringes) are used, 90 nurses responded out of 101, making the response rate 89.1%. Out of the 90 who did respond, 62 nurses (68.9 %) practiced wearing gloves always when they came in contact with sharps (syringes) and 27 nurses (30%) occasionally wore gloves in this situation. One nurse (1.1%) never wore gloves when sharps are used though no reason for the same was mentioned. Details are given in Table 3.

When asked about the frequency of changing gloves, 98 out of 101 nurses responded. Out of the 98 nurses who did respond, 96 nurses (98 %) said they changed gloves one for each patient and only 2 nurses (2%) said they occasionally changed gloves.

To know whether years of work experience did have an influence on the frequency of changing gloves by practicing nurses, we found that 96% of nurses with less than 5 years experience changed gloves one for each patient and those with 5 to10 years and more than 10 years work experience, did change gloves one for each patient.

For a question on the necessity to wash hands after removal of gloves, 99 nurses responded out of the 101, and all (100%) felt that it was indeed necessary to wash hands after removing gloves.

But in practice, we asked whether they do wash hands after removal of gloves, 97 nurses (96%) said they always washed hands after removal of gloves and only 4 nurses (4%) said they only occasionally washed hands after gloves removal.

Irrespective of their years of work experience, all participants felt that they should wash hands after removal of gloves.

In our study, 94.2% nurses with work experience less than 5 years always washed hands after glove removal in actual practice, 97% of nurses did the same with work experience 5 to 10 years and 100% of nurses with work experience more than 10 years, thus highlighting the fact that with work experience the habit of washing hands after removal of gloves also improved.

Discussion

The opinion regarding use of gloves always in all the three situations asked in the questionnaire, were, when in contact with patients' skin, blood and body fluids and when using sharps (syringes) was influenced by years of work experience.

In a study carried out in Jordan conducted among dental nurses working in commercial laboratories, only 16 percent of them wore gloves with a compliance rate of only 2.5% [7] showing a clear lack of compliance with infection control procedures. When nurses were educated, the compliance rate rose from 70% to 93% for nurses with less than 3 years of experience [8]. For the more experienced (more than 4 years) registered nurses, the compliance rate before the program was only 15% and after educating them it rose to 93%, but declined to only 50% by the fifth month [8].

In our study, among nurses with less than 5 years experience, 31.1 % used gloves always in all 3 situations, with a 5 to 10 years experience, 37 % used gloves in all three situations and with an experience of more than 10 years, 31.3 % wore them in all three situations. This fact emphasizes the need for frequent reinforcement to avoid complacency to set in.

The CDC guidelines recommends the use of gloves in all three situations asked in the questionnaire, namely when coming in contact with patient skin, blood and body fluids or while handling sharps.

When asked about how often they used gloves in the three situations mentioned above, reflecting their actual day to day practice, in our study we found that 33% would always wear gloves in all three situations. 38.3% wore it always during contact with patient's skin. 94.9% wore it always when in contact with blood and body fluids. 68.9 % of nurses wore gloves when they came into contact with sharps (syringes).

In one study it was reported that gloves are not always worn during contact with patients' secretions and sharp instruments and hands were decontaminated in 28.9% with patient contacts [9]. It was suggested in another study that by using gloves 95% of contacts to body fluid would be prevented [10].

In our study, among the 99 nurses, 70 would use gloves only on contact with blood and blood fluids, 16 would use them with contact with patient skin and only one nurse would practice wearing gloves during usage of sharps. Only six nurses thought of wearing gloves in all three situations.

Changing of gloves is an important factor in hand hygiene; it was found in a study carried out in England that only one fifth of respondents were found to change gloves between patients. Of those participants who did not change gloves between patients, half considered that blood contact was not a reason for changing gloves [11]. About 98% reported changing gloves after contact with each patient [11]. In support of glove changing it was confirmed that obstetric nurses may decrease the number of post-cesarean wound infections by having the entire team change surgical gloves after delivery of the placenta [12]. Whereas this was opposed by another study where there were no statistically significant differences in measures of post cesarean febrile morbidity based on intra-operative glove change [13]. However, in a study changing gloves did seem to reduce the number of bacterial species [14-15].

Hand washing is strongly encouraged after removal of gloves [1]. In the present study, it was encouraging to find 100 % of the respondents answering in the affirmative about the necessity to wash hands after removing gloves. On questioning about application of the same in their day to day practice we found that 96 % actually practiced it. When we compared the data with their practice towards hand washing after the use of gloves we found that nurses compliance with hand-washing increases with increased work experience.

Reducing health care-associated infections requires that health care workers take responsibility for ensuring that hand hygiene becomes an everyday part of patient care [16]. Improving hand hygiene compliance will require changing healthcare workers behavior towards glove use [15]. It was shown that the majority of the literature indicates an incomplete knowledge among trained nurses of the principles and application of universal precautions and also the questionable ability of the trained nurse to fulfill his/her role as health educator, teacher and therefore effective infection control practitioner. This underscores the role of education in improving the knowledge of trained nurses and recommends implementation of in-service training and pre-registration education [17].

Conclusion

In conclusion, it has been observed that there is a dichotomy between opinion and practice of gloving among nurses which can effectively be bridged by in-service training and education. Education to improve adherence to infection control precautions is the primary intervention that has been studied.

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Transcultural Competency in the Curricula of Nursing

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Introduction

1. Introduction

Globalization and immigration are causing a rapid growth of culturally diverse populations, therefore, now more than ever, health care providers must become more aware of and sensitive to the culturally diverse meanings of health, illness, caring, and healing practice. Personal background, heritage, and language have a direct impact on both the way patients or clients reach and respond to health care services and the way health care providers practice within the system (Lowe & Archibald, 2009).

In this context, it is essential to fully acknowledge, appreciate, and understand the terms "Cultural Evolution" and "Cultural Revolution". Cultural Evolution refers to the process of growth and change within a society, while Cultural Revolution, on the other hand, is the effort to embrace the evolution of a broader worldview (Jeffreys, 2006). Both of these concepts are central in the career of a nurse. Clinical practice areas can be in institutional settings, such acute and long-term care settings; community-based settings, such as nurses' practitioners and doctors' offices; and lastly, public health and occupational settings, such as, clinics, schools and universities. A health care facility may be considered one of the most ethnically and culturally varied environments; it includes intimate interaction among both patients and other multidisciplinary staff workers, each of whom has their own diverse beliefs and practice. Culture and ethnicity usually determine one's view of health and illness, including types of acceptable treatments and follow ups, guardianship for decision making, and patient's reactions and behaviours.

This paper reviews the implications of cultural and ethnic diversities on the health care system and explores the dimensions of the term "Cultural Competence" in relation to nursing practice and education. Moreover, it critically explores the four major theories developed on cultural competency: specifically, those of Leininger (1991), Purnell and Paulanka (1998), Giger and Davidhizar (2004), and Campinha-Bacote (2007). In addition, it provides an overview of the models' application in the current literature and presents suggested and current standards for a curriculum that enables culturally competent nurses to face key issues, concerns, and new challenges in the health care profession today and in the future.

2. Definition

Culture

Internationally Recruited Nurses (IRNs) are valuable resources to tackle predicted and existing nursing shortage in many countries, including Australia, the United States, the United Kingdom, and Canada. They account for more than sixty percent of the nursing work force in some health care organisations. Once employed, many IRNs face difficulties due to differences in culture and language in their new country of practice. Unlike language, culture is more difficult to define due to its complexity and constantly changing dynamic nature (Hearnden, 2008).

Over the years, culture has been seen in many different ways and therefore has a variety of definitions. Leininger (1991) defined culture as "the learned, shared, and transmitted beliefs, values, norms, and life experiences of a certain group that that are generally transmitted intergenerationally to direct their thinking, decisions, and actions in mannered ways." He defines cultural competence, on the other hand, as involving "systems, providers, and agencies with the capability of responding to the certain needs of populations whose cultures are different from the dominant one." Kramsch (1998) defines culture as membership in a discourse community that shares a common social space and history and common imagination. Even when they have left that community, its members may retain, wherever they are, a common system of standards for perceiving, believing, evaluating, and acting. These standards are what are generally called their "culture". Sully and Dallas (2005), on the other hand, said "it is useful to think of culture as generally concerning organisations, professions, and groups that have shared assumptions and beliefs which link the shared values held. These values in turn produce shared norms that govern patterns of behaviour." Davidhizar, Giger, and Hannenpluf (2006) define culture as a patterned behavioral response that develops over time as result of imprinting the mind through social and religious structures and intellectual and artistic manifestations. Culture is also the result of acquired mechanisms that may have innate influences but are primarily affected by internal and external environmental stimuli. Culture is shaped by values, beliefs, norms, and practices that are shared by members of the same ethnic group. Culture guides our thinking, doing, and being and becomes patterned expressions of who we are. These patterns expressions are passed down from one generation to the next.

2.1 Clashes of Cultures

Culture can be either learnt or transmitted by family and other social organisations, and it is shared by the majority of the group to which one "belongs". This will affect one's worldview, self-worth, self-esteem, and guide one's decision-making. Culture varies within and between members and generations in a single cultural and ethnic group. Cultural evolution is driven by the rapid growth in the world's migration, changes in the demographic patterns, changes in fertility rates, increasing numbers of multiethnic and multiracial individuals, and advanced technological breakthroughs associated with health care. Further. As defined by Purnell and Paulanka (2003), cultural diversity refers to variety in race, ethnic orientation, and beliefs; thus, nurses need to deliver culturally appropriate and competent care to culturally diverse patients and their families.

Within the nursing literature, cultural diversity, changes, and the need to have culturally congruent nursing care was repeatedly reported in various countries (Davidhizar, Giger & Hannenpluf, 2006; Jeffreys, 2006). Another aspect arising from the diversity of cultures is Health Disparity, which, according to the National Institute of Health is defined as "the differences in the incidence, prevalence, mortality, and burden of disease and other adverse health conditions that exist among specific population groups". Atrash and Hunter (2006) define the factors contributing to these disparities, including uneven levels of education, salaries and incomes, environmental and economic conditions, specific health attitudes and lifestyles, access to care, and quality of service provided. It should be noted, however, that delivering culturally competent care will not necessarily decrease or prevent health disparities.

3. Cultural Competency Overview

Transcultural competency Background

Cultural competence is described as a multidimensional process that aims to achieve culturally congruent health care. Although this concept is fundamentally important and is obviously applicable to the contemporary issues faced nowadays, cultural competence is considered new in the nursing literature and it is only in the last five decades that nurses have begun to value the need to integrate culturally appropriate practice into daily nursing care for clients. Moreover, as stated by Narayanasamy and White (2005, p.103), transcultural health care is defined as the "formal areas of study and practice in the cultural beliefs, values and life ways of diverse cultures and the use of knowledge to provide culture-specific or culture-universal care to individuals, families and groups of particular cultures".

Transcultural nursing models provide the nurse with the foundations needed to become knowledgeable about the various cultures faced on the practice setting. These models continue to develop and refine to become materials of guidance to be used internationally. Dr. Madeline Leininger has provide the basic concept for cultural competency in nursing practice and today there different models and theories to be followed, including those of Leininger (1991), Purnell and Paulanka (1998), Giger and Davidhizar (2004), and Campinha-Bacote (2007) (Dayer-Berenson, 2010).

4. Transcultural Theories Related to Nursing

4.1 Leininger Model (1991)

Dr. Madeline Leininger first developed her theory, "Cultural Care, Diversity, and Universality," from both anthropological and nursing perspectives in 1984. She defined transcultural nursing as a "humanistic and scientific area of formal study and practice in nursing, which is focused on the comparative study of cultures with regards to differences and similarities in care, health, and illness patterns based on cultural values, beliefs, and practices in the world, and the use of knowledge to provide culturally specific and/or universal nursing care for people". The purpose of this theory is to expand transcultural nursing knowledge and practice to achieve culturally congruent nursing care whether the patients are culturally diverse or similar. The foundation of Leininger's theory is that cultures exhibit both diversity and internationalization. It was her intention to let nurses try and step into the patients' shoes and look at things from their perspectives (Davidhizar, Giger & Hannenpluf, 2006; Engebretson, Mahoney & Carlson, 2008; Dayer-Berenson, 2010)).

Leininger expressed the need to expand the definition of nursing from just involving its four traditional metaparadigms, (i.e. the concept of self, environment, health, and nursing, to caring. Caring, according to Leininger, is unique to nursing and essential for life, survival, and human development. Transcultural nursing is a branch of nursing that is learned by comparing and analyzing studies of different cultures as they apply to nursing and health-illness practice, beliefs, and value. Transcultural competence was first developed in the mid1960s by Madeline Leininger, when she (and other nursing scholars) wished to obtain doctoral degrees and become nurse anthropologists. In her first course on transcultural nursing, she stated that this concept was created in response to nurses having increased exposure to diverse groups of patients. This increased exposure was the result of the changing demographics in the United States during that period as well as the leadership of the States in health care delivery, resulting in many people from different countries coming to America to seek medical care. Furthermore, due to the nurses' direct contact with patients when providing care, it was crucial to understand how to work effectively within a culturally diverse atmosphere and transcend cultural boundaries (Andrews & Boyle, 2008; Dayer-Berenson, 2010).

4.2 Purnell and Paulanka Model (1998)

Unlike other theories about cultural competency, Purnell and Paulanka's model extend some of the categories under which the concepts are organized. This model consists of two sets of factors: macro-aspects and micro-aspects. In the diagrammatic representation of the model, Purnell and Paulanka use concentric circles to identify the macro-aspects and micro-aspects. The macro-aspects form the wider outer circles and the micro-aspects the inner circle, all constituting segments of the whole. From the outermost circle moving inwards to the centre, the concentric circles are made up of the 'global society', the community, the family and the person.

One of the unique features in the Purnell and Paulanka model is its flexibility, which allows it to be applied for all health care members. It includes the recognition of biocultural ecology and workforce problems and the impact they have on a culturally diverse patient. Purnell and Paulanka identify a number of benefits to the use of their model. First of all, the model provides a framework for health care providers to learn about the inherent concepts and characteristics of new cultures. This model links between historical perspectives and their impact on one's cultural international view. It also links the central relationships of culture so that congruence can occur and facilitate the delivery of culturally competent care. Moreover, the model provides a framework for nurses to reflect on and consider each patient's unique characteristics, such as, motivation, intentionality, and conceptions of illness and health care. Further, it provides a structure for analyzing cultural data, and it allow the nurse to view the individual, family, or group with its own unique cultural environment by considering communication strategies to overcome identified barriers. The Purnell and Paulanka model has an organizing framework of twelve domains that are common to all cultures. These twelve domains are essential for assessing the enthnocultural attributes and they include the individual, family, or group, the inhibited localities and topography, communication, family role and organization, workforce issues, biocultural ecology, high risk health behaviours, nutrition, pregnancy and child bearing practice, death rituals, spirituality, and health care practice and health care practitioners (Dayer-Berenson, 2010).

4.3 Giger and Davidhizar Model (2004)

Giger and Davidhizar state that, although all cultures are different, there are several organizational factors that are common to all, including communication, space, social organization, time, environmental control, and biologic variations. However, this model does not presume that every person within an ethnic or cultural group will behave or act in the same manner; therefore, according to this model it is essential to view each individual as culturally unique and that they be assessed according to the six identified phenomena in this model (Dayer-Berenson, 2010). Giger and Davidhizar's six organisational factors will be discussed thoroughly later in this paper. The model also explores the variables affecting the caregiver's response and the recipients' perspective in relation to cultural diversity (Davidhizar, Giger & Hannenpluf, 2006).

This model was first developed in 1988 to help undergraduate nursing students assess and provide health care to those of different cultures. In the present form, the model provides a framework that systematically assesses the role of culture on illness and health and has been used in a variety of settings and by different disciplines. However, in 1993, both Purnell and Paulanka's, and Giger and Davidhizar's models were combined and utilized in other health care facilities, like medical imaging, dentistry, education, and healthcare administration. This combined theory has been the theoretical framework for dissertations and other researches (Dayer-Berenson, 2010).

4.4 Campinha-Bacote Model (2007)

Campinha-Bacote first developed this model in 1991, and by 1998 it was revised to become known as the process of "Cultural Competency in the Delivery of Healthcare Services". The aim of this model is to look at cultural competence as a process rather than an end result, where the nurse is required to strive to achieve effective and optimum care with individuals (Dayer-Berenson, 2010). Cultural competency is defined as "the process in which the health care provider continuously strives to achieve the ability to work effectively within the cultural context of a client, individual, family, or community (Kardong-Edgren & Campinha-Bacote, 2008). The focus of this model is on the process of cultural competence (rather than being culturally competent), utilizing the five components of this model, as discussed below (Engebretson, Mahoney & Carlson, 2008).

Campinha-Bacote's model of care is based on five main components: cultural awareness, cultural skills, cultural knowledge, cultural encounters, and cultural desire. Cultural awareness is the process of self-examination of one's own biases towards others and the in-depth exploration of one's culture and background. It also involves one's awareness of documented racism and other “isms” in the health care system. Cultural skill is the ability to conduct cultural and physical assessment to collect data regarding the client’s presented problem. Cultural knowledge, on the other hand, is defined as the process where the healthcare professional seeks and obtains information about the worldview of different cultures and ethnic groups, as well as biological variations and different understandings of illness and health. Cultural encounter is the process that encourages the healthcare professional to engage in cultural interactions to modify existing beliefs about culturally diverse groups and avoid possible stereotyping. Lastly, cultural desire is the motivation of health care professional to be engaged in the process of being culturally aware, knowledgeable, skilled, and competent, and seeking cultural encounter (Dayer-Berenson, 2010; Law & Muir, 2006).

5. Discussion

In their paper, Law and Muir (2006) explored the complexity of the internationalisation of the nursing curriculum by discussing its manifestation within a British university during a short student exchange program. Various models were explored and critiqued for their efficiency, including Leininger’s cultural care diversity and universality theory. This theory was criticised for ignoring structural and political process, assuming that knowledge of different cultures will result in providing better care, and that focusing on cultural diversity will lead to the reinforcement of stereotyping and maintain the sense of inequality between nurses and patients. Further, it was stated that Talabere (1996) has gone so far as to argue that the term “cultural diversity” is itself seen to be ethnocentric and that it’s use entails major issues of discrimination, racism and a lack of equality of opportunity. For example, Leininger’s model ignores the view of diversity within cultures, such as between age and youth, rich and poor, and urban and rural. While criticism and limitation of transcultural nursing theories are present, their importance in forming vital curriculum components for nursing students must be acknowledged. Students may find, for example, Leininger’s model (1991) a simple way to explore societal and professional culture and Ginger and Davidhizar’s (1999) six components of human diversity useful to assist in observations and reflections. Nonetheless, it was Campinha-Bacote’s model (1999) that was used in the student exchange program between the U.S., the U.K., and other European countries for addressing cultural competence in health care, by achieving cultural desire within students. Thus, leading to the development of cultural awareness, knowledge, skills, and competence (Law & Muir, 2006).

Another model used for nursing education is the Giger- Davidhizar Transcultural Assessment Model (GDTAM), which, as stated by Davidhizar, Giger and Hannenpluf (2006), is a modern, yet simple, extension of Dr, Leininger’s model that had been used widely in nursing schools as an assessment tool and a way to gain appreciation for diverse cultures. GDTAM offers an assessment umbrella that includes the aforementioned six elements to assure provision of culturally sensitive care (communication, space, social organisation, time, environmental control, and biological variations).

The first phenomenon is communication. Communication includes the whole process of human interaction and behaviour. It is the means by which culture is transmitted and preserved though written, verbal, and non- verbal methods. Communication variables include dialect, language, style, volume of speech, touch, context of words or emotional tone, and kinesics. Due to the variations in theses variables within and between different cultures, communication can present a barrier between nurses and patients, as well as their families. Thus, it is crucial for nurses to appreciate different approaches of communication to provide more culturally sensitive care.

The second of the six phenomena is space, which is defined as “the distance and intimacy techniques that are used when relating verbally or non- verbally to others. Like those of communication, spatial needs vary according to the cultural orientation and the setting in which the individual is raised in. Dayer-Berenson (2010) stated that Giger and Davidhizar (2004) identified four aspects of behaviour patterns related to space that should be assessed to enhance a healthy interaction. These aspects include, proximity to others, attachment with objects in the environment, body posture, and movement in the setting. Physical proximity between patient and caregiver is based on the level of intimacy and trust. Nurses should be sensitive to patients who may feel that their personal space is being violated by nurses’ actions. Anxiety may be created as a result of such behaviour.

The third phenomenon to be discussed is social organisation. Social organisation is the manner in which a cultural group organises itself around the family group, structure, and organisation, beliefs and religion values, and role assignment. “Enculturation” is the process of learning social behaviours and it, too, differs according to the cultural setting surrounding the individual. Matters like rules of decision making, male and female orientation, and the use of titles, are important for the nurse to be aware of by assessing the unique and personal behaviours of patients and their families associated with respect to avoid offending.

The fourth phenomenon is time and it, like the other phenomenon discussed, is affected by family and cultural upbringing in relation to whether an individual is “clock- or socially- oriented”. Clock orientation is a feature valued by most Westerns, where individuals are usually oriented to past, present, or future, and appointments tend to be kept at the prescribed time and not doing so is considered rude. Other cultures focus on the present person and place rather than on social time, where activities start only when a previous social event is completed; this is known as being socially oriented. Further, time can be perceived differently to different cultures and this affects the delivery of health care directly, where the orientation of different time phases are needed to effect preventive health measures and increase compliance with medication regimen or required health screenings.

The fifth phenomenon in the GDTAM is environmental control, which is defined as internal and external feelings of control in the patients' social psychology. People with different cultures have different beliefs about the cause of health and wellness and the treatment of illness.

The last phenomenon is biological orientation. Biological variation may be considered the least understood feature in the cultural diversion. An investigation known as "biocultural ecology" started in 1975, and with development it revealed the presence of many biological variations between races. Modern DNA mapping provides a wider understanding of the prevalence of some diseases among different populations and, therefore, provides more appreciation of many aspects of care including drug's pharmacokinetics, including absorption, metabolism, distribution, and elimination, and drug's pharmacodynamics, which is the mechanism of action and affect on the target. It also reveals factors related to pain, such as pain tolerance, nutritional preferences and deficiency, and tendency for illness to aggravate (Davidhizar, Giger & Hannenpluf, 2006; Lipson & Desantis, 2007; Dayer-Berenson, 2010). Another study conducted by Kardong-Edgren and Campinha-Bacote (2008) evaluates four different nursing program curricula in developing culturally competent new graduates. Two programs utilise a theory or a model by recognised transcultural nursing theorists, including Leininger and Campinha-Bacote. One program utilises an integrative approach, where no specific model is employed, while another program utilises a free-standing two credit culture course within the curriculum. It was argued that using an integrative approach may allow programs to avoid problems associated with adding cultural content in the curricula, which is seen to some as a soft science compared to other biomedical components. Although some may argue that nursing, as the diagnosis and treatment of human illness, should preclude the need of teaching cultural competency; this approach reduces the sociological and economic factors in which health encounters occur and health decisions are made.

By using a version of Campinha-Bacote's Inventory for Assessing the Process of Cultural Competency Among Healthcare Professionals-Revised (IAPCC-R), it was concluded that no curricular strategy is clearly better and more effective than another. As a result, more questions than answers were raised due to the final outcomes of that study. Questions such as "Is cultural awareness a more realistic goal for graduating nursing students?" imply that faculty are to expect the presence of cultural competency to occur after graduation. Another question was "What are the qualifications of faculty currently teaching cultural competence?" and "Is the self-report evaluation tool is the best way to assess cultural competency?" Campinha-Bacote (2006) suggests that only less than 75 nurses internationally are currently certified in transcultural nursing. Consequently, it is clear that more studies are required to answer these enquiries.

Another model used to apply transcultural competence in practice is Purnell's model, which has been classified by a number of nursing theorist as a holographic and complexity theory because it involves an organisational framework that enable its usage by all healthcare providers in different disciplinary settings (Larry, 2005). It is stated by Lipson and Desantis (2007) that the Purnell model is most often used at the bachelor level in communication and health assessment courses. Dr Purnell mentioned Excelsior College as an example of the success of this model among some 17,000 culturally diverse students. The Purnell model is a circle [Appendix 1] with an outlying frame representing global society, a second frame representing community, a third frame representing family, and an inner frame representing the person. The interior of the concentric circles is divided into twelve cultural domains and their concepts, where they all interrelate to one another.

The first in the twelve domains is overview and heritage, which includes concepts related to the country of origin, the effects of the geography of the country of origin, and current residence, politics, economics, educational status, and occupation. The second domain is the concepts related to communication, which include the dominant language and dialects, contextual use of the language, paralanguage variations, nonverbal communication, and spatial distancing. The third domain is family roles and organization, which includes concepts related to the head of the household and gender roles; family roles, priorities; and developmental tasks of children and adolescents. Social status and views toward alternative lifestyles such as single parenting, sexual orientation, childless marriages, and divorce are also included in this domain. The fourth area includes workforce issues that are related to autonomy, acculturation, assimilation, gender roles, ethnic communication styles, individualism, and health care practices from the country of origin or residence. Next are the biocultural ecology factors that include manifestations variations in ethnic and racial origins, such as skin coloration and other physical differences.

The sixth domain includes high-risk behaviours that should be considered by health care providers, such as smoking, the use of alcohol and recreational drugs, lack of physical activity, and sexual practices. The seventh area involved is nutrition, which includes the meaning of food: food choices, rituals; and how food and food substances are used health promotion, treatment and wellness. The eighth domain is pregnancy and childbearing, including fertility practices; methods for birth control; and attitudes toward pregnancy, birthing, and postpartum treatment. There are also the death rituals that include how individuals and their culture view death, rituals and behaviours to prepare for death, and burial practices. This is connected to the next domain, which is spirituality, which encompasses religious practice, prayer, and any practices that bring peace and meaning to life. Health care practice is the eleventh domain and it focuses on traditional, religious, and biomedical beliefs, self medicating practices, and views regarding mental illness and organ donation and transplantation. The final domain of Parnell's model is health care practitioner concepts, including the status, function, and perceptions of traditional, religious, and allopathic biomedical health care providers. All health care providers in any practice setting can use this model including nurses, physicians, and physical and occupational therapists in practice, education, administration, and research in Australia, Belgium, Canada, Central America, Great Britain, Korea, South America, and Sweden and thus shows promise for becoming a major contribution to transcultural nursing and health care (Larry, 2005).

6. Transcultural Competence in the Curricula of Nursing

One of the biggest issues facing nursing education in recent times is the effort to develop more culturally sensitive graduates. Although theory and literature are sufficient to introduce cultural concerns, problems such as the most effective applications of these skills are limited by the nature of the clinical experience and patients' populations students may face and treat. In Europe, there have been several reforms in nursing education, especially different processes trying to harmonise its approach. Nevertheless, the nursing education system still lacks conformity on these issues (Salminen, et al. 2010). Consequently, educators strive to turn students into culturally sensitive practitioners, where cultural content and experience are thought of within the curriculum to develop improved cultural competence (Halloran, 2009). Thus, many schools require a specific course that focuses on transcultural nursing, cultural concepts in health, health and culture, or more recently, health disparities. These courses tend to apply medical anthropology topics to nursing practice or combine medical anthropology with cross-cultural nursing. Faculty members usually use the nursing literature and models to develop their own method of including cultural content; this is known as the integrative approach (Lipson & Desantis, 2007).

6.1 Standards for Culturally Competent Curricula for Nursing

A multidisciplinary teaching model is essential to develop a pilot course for students to gain knowledge and skills in providing diverse clients with culturally appropriate services during field and clinical experience. According to this model, in order to develop culturally sensitive graduates, the curriculum should include five components, which are cultural awareness, knowledge, desire, encounter, and skills. Campinha-Bacote's Inventory for Assessing the Process of Cultural Competency Among Healthcare Professionals-Revised (IAPCC-R) provides twenty-five items to measure these cultural constructs (Kardong-Edgren & Campinha-Bacote, 2008, p.39; Munoz, DoBroka & Mohammad, 2009). Moreover, in their book, Ring et al. (2008) interweave the health care curricula with the Accreditation Council for Graduate Medical Education (ACGMA) and Association of American Medical Colleges (AAMC) requirements for medical education in culture. The curriculum covers six major units, including introduction to culture and cultural competence, which involves defining contemporary diverse terms and their implications in health care. Another unit covers the key concepts in cultural competence, which include the value of social determinants, describing historical models of common health beliefs, and the value of curiosity, empathy, and respect in patient care. The third area of discussion is bias, stereotyping, culture, and clinical decision-making. Self assessment has an important role in the quality of care provided; thus, these issues must be recognised and evaluated for their effects upon interaction with patients, families, and community. Another area in the curriculum is concerned with the definition and contribution of health and healthcare disparities and the factors involved that have an impact on them, such as historical, political, environmental, and institutional factors. The fifth unit covers the discussion of cultural competence in patient care, including models of effective cross-cultural communication and theories of assessment. Finally, the curriculum addresses factors that influence community actions towards cultural competence are disclosed including the population's health criteria, social mores, cultural beliefs and needs.

These units are presented with attention to Culturally and Linguistically Appropriate services (CLAS) [Appendix 2], where the office of Minority Health developed standards to offer health care providers with guidance to promote and support the attitudes, behaviours, knowledge, and skills necessary to work respectfully and effectively with patients and each other in a culturally diverse environment (Spector, 2009; Cuellar, Brennan, Vito & Siantz, 2008).

A document recently issued by the American Academy of Nursing has listed twelve recommendations of Expert Panel on Cultural Competence to assist the process of having culturally sensitive health care providers, nurses in particular [Appendix 3] (Joyce, et al. 2007). Another contribution to the transcultural competency curricula is the Cultural Competence and Confidence (CCC) model [Appendix 4], designed by Jeffreys (2006), which aims to interrelate aspects that explain, describe, affect, and/or predict the process of learning and developing cultural competence with incorporation of the construct of transcultural self-efficacy as a major influencing factor. “Transcultural self-efficacy” is the perceived confidence in performing or learning general cross-cultural nursing skills among a culturally diverse population. Although standards and competencies have shifted to more formal approaches and increasingly developed within the nursing curricula and regulatory frameworks, it is crucial to identify the minimal required level of performance in each competency (Chiarella, Thoms & McInnes, 2008).

Salminen, et al. (2010) provide rrecommendations to target challenges in future nursing education, including recognising the importance of demonstrating competency categories for nursing students and registered nurses in curricula, which must be more specific with regards to content, learning strategies, and evaluation of learning outcomes. This entails the need for integration of theoretical studies, clinical practice in health care settings, and research skills relating to the culturally diverse population’s needs. Further, the quality of nursing education should be evaluated in local, national, and international networks, and thus provide the optimum standards for culturally sensitive health care providers. A substantial increase in the conditions for students’ and educators’ mobility is required, where knowledge about cross-cultural activities and willingness to understand diverse populations are a necessity.

7. Conclusion

The main aim of having transcultural desire, awareness, knowledge, skill, and competence in the curricula of nursing is to provide optimum patient care that is framed with respect, appreciation, and understanding to the culturally diverse nature of each individual involved in the process. Four major cultural competence models and theories, including those of Leininger (1991), Purnell and Paulanka (1998), Giger and Davidhizar (2004), and Campinha-Bacote (2007) are discussed thoroughly in relation to the current nursing literature. Leininger’s Model illustrates the major components and interrelationships of cultural care, diversity, and universality. When using her theory in caring for patients, nurses should consider the presence of cultural mismatch and develop awareness of each individual’s style of interaction (Dayer-Berenson, 2010). On the other hand, Davidhizar, Giger and Hannenpluf (2006) argued the need to use the (GDTAM) to assess patients in order to provide culturally sensitive and competent care. Purnell and Paulanka’s model is considered flexible because it can be applied for all healthcare members using the macro- and micro-factors for individuals involved (Larry, 2005). However, Campinha-Bacote’s model of care added new dimensions to the process of cultural sensitivity by identifying the five main components (which are cultural awareness, cultural skills, cultural knowledge, cultural encounters, and cultural desire). Nonetheless, there are no articles in the literature clearly identifying a certain model to be better than another. Although theory and literature are sufficient to introduce and address cultural concerns to some extent, effective application of these skills is problematic, where current practices are not solving problems nursing faces, where evaluating cultural competency of graduating nursing students is not yet established, and further studies in that area are required (Kardong-Edgren & Campinha-Bacote, 2008; Law & Muir, 2006).

(Appendices begin next page)

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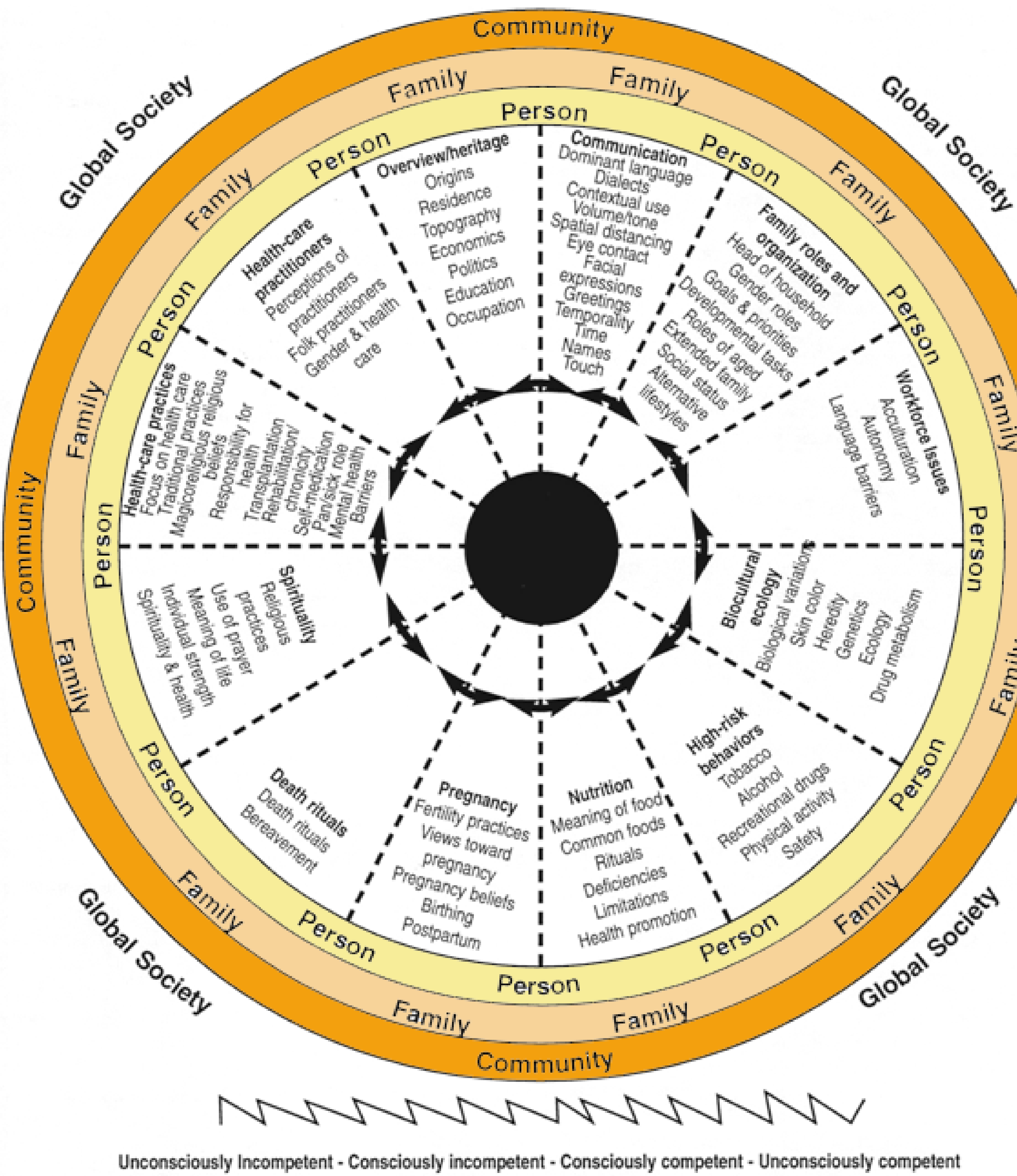
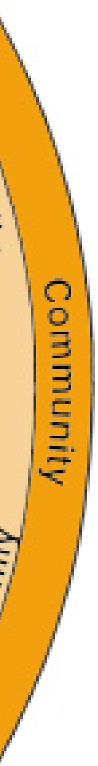


Primary characteristics of culture: age, generation, nationality, race, color, gender, religion

Secondary characteristics of culture: educational status, socioeconomic status, occupation, military status, political beliefs, urban rural residence, enclave identity, marital status, parental status, physical characteristics, sexual orientation, gender issues, and rea migration (sojourner, immigrant, undocumented status)

Appendix 1



National Standards for Culturally and Linguistically Appropriate Services in Health Care (CLAS)

1. Health care organizations should ensure that patients/consumers receive from all staff member's effective, understandable, and respectful care that is provided in a manner compatible with their cultural health beliefs and practices and preferred language.

2. Health care organizations should implement strategies to recruit, retain, and promote at all levels of the organization a diverse staff and leadership that are representative of the demographic characteristics of the service area.

3. Health care organizations should ensure that staff at all levels and across all disciplines receive ongoing education and training in culturally and linguistically appropriate service delivery.

4. Health care organizations must offer and provide language assistance services, including bilingual staff and interpreter services, at no cost to each patient/consumer with limited English proficiency at all points of contact, in a timely manner during all hours of operation.

5. Health care organizations must provide to patients/consumers in their preferred language both verbal offers and written notices informing them of their right to receive language assistance services.

6. Health care organizations must assure the competence of language assistance provided to limited English proficient patients/consumers by interpreters and bilingual staff. Family and friends should not be used to provide interpretation services (except on request by the patient/consumer).

7. Health care organizations must make available easily understood patient-related materials and post signage in the languages of the commonly encountered groups and/or groups represented in the service area.

8. Health care organizations should develop, implement, and promote a written strategic plan that outlines clear goals, policies, operational plans, and management accountability/oversight mechanisms to provide culturally and linguistically appropriate services.

9. Health care organizations should conduct initial and ongoing organizational self-assessments of CLAS-related activities and are encouraged to integrate cultural and linguistic competence-related measures into their internal audits, performance improvement programs, patient satisfaction assessments, and outcomes-based evaluations.

10. Health care organizations should ensure that data on the individual patient's/consumer's race, ethnicity, and spoken and written language are collected in health records, integrated into the organization's management information systems, and periodically updated.

11. Health care organizations should maintain a current demographic, cultural, and epidemiological profile of the community as well as a needs assessment to accurately plan for and implement services that respond to the cultural and linguistic characteristics of the service area.

12. Health care organizations should develop participatory, collaborative partnerships with communities and utilize a variety of formal and informal mechanisms to facilitate community and patient/consumer involvement in designing and implementing CLAS-related activities.

13. Health care organizations should ensure that conflict and grievance resolution processes are culturally and linguistically sensitive and capable of identifying, preventing, and resolving cross-cultural conflicts or complaints by patients/consumers.

14. Health care organizations are encouraged to regularly make available to the public information about their progress and successful innovations in implementing the CLAS standards and to provide public notice in their communities about the availability of this information.

The National Center for Complementary and Alternative Medicine (NCCAM)

Appendix 2

versus
son for

Comprehensive Recommendations of Expert Panel on Cultural Competence of the American Academy of Nursing (AAN)

1. The AAN, through its publications, mission statements, and yearly conferences, must make an explicit commitment to quality, culturally competent care that is equitable and accessible by targeting four groups: (a) health care consumers, (b) health care providers, (c) health care systems, and (d) communities.

2. The AAN will collaborate with other organizations and communities in developing guidelines.

3. The AAN shall develop mechanisms to synthesize existing theoretical and research knowledge concerning nursing care of ethnic/minorities and other vulnerable populations.

4. The AAN, through its expert panels and commissions, must create an interdisciplinary knowledge base that reflects health care practices within various cultural groups, along with human communication strategies that transcend interdisciplinary boundaries to provide a foundation for education, research, and action.

5. The AAN, through its expert panels and commissions, must identify, describe, and examine methods, theories, and frameworks appropriate for utilization in the development of knowledge related to health care of minority, stigmatized, and vulnerable populations.

6. The AAN shall seek resources to develop and sponsor studies to describe and identify principles used by organization magnets that (a) provide an environment that enhances knowledge development related to cross-cultural, ethnic minority/stigmatized populations, and (b) attract and retain minority and other vulnerable students, faculty, and clinicians.

7. The AAN, through its various structures, must identify health care system delivery models that are the most effective in the delivery of culturally competent care to vulnerable populations and develop mechanisms to promote the necessary changes in the U.S. health care delivery system toward the identified models.

8. The AAN must collaborate with other organizations in establishing ways to teach and guide faculty and nursing students to provide culturally competent nursing care practices to clients in diverse clinical settings in local, regional, national, and international settings.

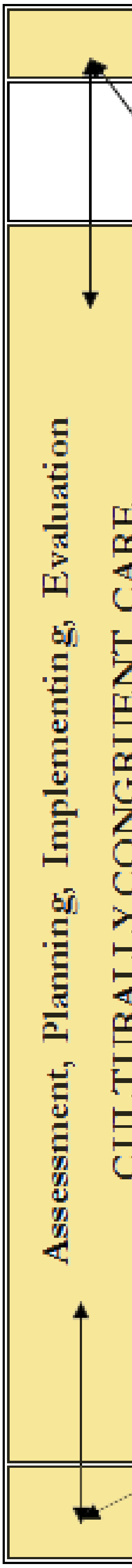
9. The AAN must collaborate with racial/ethnic nursing organizations to develop models of recruitment, education, and retention of nurses from racial/ethnic minority groups.

10. The AAN will collaborate with other organizations in promoting the development of a document to support the regulation of content reflecting diversity in nursing curricula. In addressing regulations, specific attention needs to be given to the NCLEX examinations, continuing education, and undergraduate curricula.

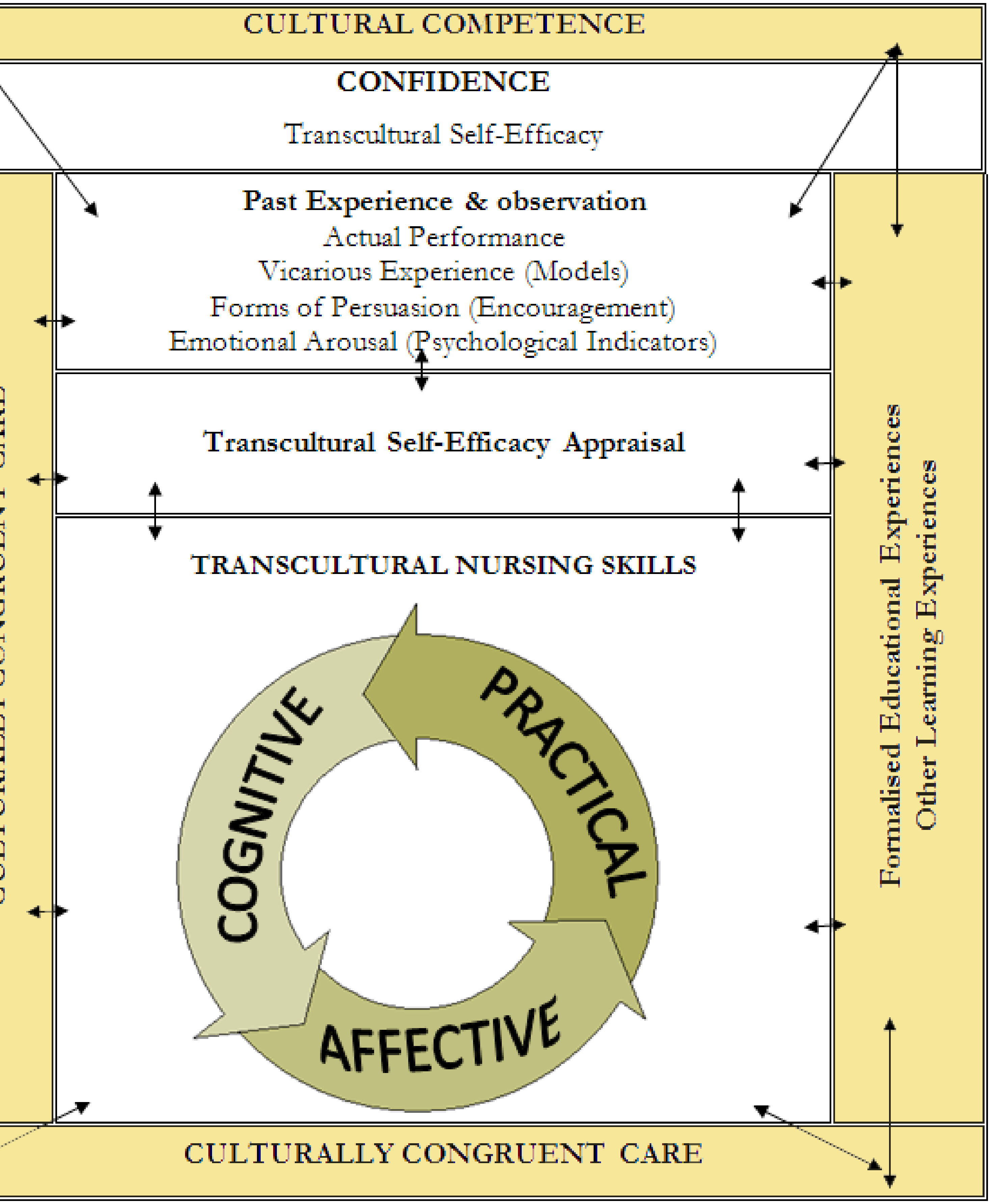
11. The AAN must take the lead in promulgating support of research funding for investigation with emphasis on interventions aimed at eliminating health disparities in culturally and racially diverse groups and other vulnerable populations in an effort to improve health outcomes. The AAN must take a more proactive stance to encourage policy makers to create policies that address the elimination of health disparities and ultimately improve health outcomes.

12. The AAN must encourage funding agencies' requests to solicit proposals focusing on culturally competent interventions designed to eliminate health disparities.

Appendix 3



Appendix 4


CULTURAL COMPETENCE
CONFIDENCE
Transcultural Self-Efficacy
Past Experience & observation
Actual Performance
Vicarious Experience (Models)
Forms of Persuasion (Encouragement)
Emotional Arousal (Psychological Indicators)
Transcultural Self-Efficacy Appraisal
TRANSCULTURAL NURSING SKILLS
COGNITIVE
PRACTICAL
AFFECTIVE
Formalised Educational Experiences
Other Learning Experiences
CULTURALLY CONGRUENT CARE

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Loss of vision following severe ocular injury resulting from corporal punishment: a case report

ABSTRACT

The report is that of Nigerian child who lost vision in his left eye following traumatic hyphema. The patient who had enjoyed good vision in both eyes prior to the incident sustained blunt trauma to his left eye in the course of corporal punishment by a school teacher. The patient was placed on conservative management and the hyphema resolved completely however the vision was nil perception of light in the affected eye due to secondary glaucoma. The need to exercise caution and restraint in the course of corporal punishment cannot be overemphasized so as to prevent avoidable injuries.

Key words: Blunt trauma, hyphema, corporal punishment, Nigeria

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Introduction

Corporal punishment is often practiced to discipline erring children.(1,2,3) However corporal punishment could inadvertently result in severe ocular injuries.(2,3) It is a major cause of morbidity and mortality in USA and some other countries.(4) In the course of corporal punishment, different instruments are used indiscriminately to discipline erring children.(5) No part of the body is spared during corporal punishment and this could result in loss of vision arising from ocular injury. Corporal punishment is a major cause of injuries in children world wide.(1,4) There have been previous reports of ocular injuries resulting from assault inflicted during administration of corporal punishment in schools and at home.(2,6) Eye injury is one of the common causes of monocular blindness world wide.(7) Ocular injuries occur frequently in children and these often require prompt attention.(5) Traumatic hyphema resulting in loss of vision in children due to ocular trauma has been reported in children in the U.S.A. (6) It often results from unnecessary injuries that are largely preventable.(7) The eyes rank as the third most common organ affected by injuries, next to the hands and feet.(8)

In view of injuries to school children due to corporal punishment, we decided to report this case of loss of vision following severe ocular injury inflicted on the child in the course of corporal punishment by a school teacher, so as to draw the attention of the populace to the dangers inherent in the practice.

Case History

A 15 year old Nigerian male child presented to the eye clinic of Federal Medical Centre, Owo, Ondo State, Nigeria in February, 2010 on account of a six day history of left ocular pain, loss of vision and lacrimation following the blunt trauma the patient sustained in the affected left eye. There was associated redness of the left eye, discharge, photophobia and headache. The patient was inadvertently hit on the affected left eye by one of his school teachers for not doing his assignment. The patient had enjoyed good vision in both eyes prior to this incident. The patient presented at a General Hospital prior to presentation to us. He received first aid treatment at the hospital.

On examination at presentation, the visual acuity on the right eye was 6/5 while that of the left was nil perception of light. The anterior and posterior segments of the right eye were essentially normal. The conjunctiva of the left eye was hyperaemic; the cornea had microcystic oedema and there was hyphema of about 30%. The pupil was mid-dilated. There was poor view of the posterior segment. The intraocular pressure was 12mmHg on the right and 44mmHg on the left. The patient was commenced on conservative management and this included bed rest at home. He was placed on Tabs acetazolamide, gutt chloraphenicol, gutt tropicamide and gutt Dexamethazone. The affected left eye was also padded. The hyphema resolved completely within two weeks of conservative management and the intraocular pressure reduced to 14mmHg. However fundoscopy done following resolution of the hyphema, revealed a pale cupped disc with cup:disc ratio of 1.0. In view of the loss of vision in the left eye, the need for the patient to protect the right eye (only eye) was impressed on him.

Discussion

It is quite unfortunate that the patient who presented had lost vision in the affected eye prior to presentation. This brings to the fore the need for patients to present early following ocular injuries so that appropriate measures can be instituted to limit the damage to the eyes. Apparently the school teacher who inflicted injury on the child did so inadvertently as she was trying to correct the patient for failing to carry out his assignment. The raised intraocular pressure which was uncontrolled could have contributed to the permanent loss of vision in the affected eye as the patient probably suffered the damage to the optic nerve as a result of the high intraocular pressure. There has been previous reports of loss of vision arising from corporal punishment. Calzada et al stated that ocular injury to a child can result from trauma inflicted with a belt by a parent or care taker, during corporal punishment and this may result in permanent loss of vision.(6) A study done in South- Eastern Nigeria revealed that corporal punishment was responsible for a significant proportion of ocular injuries.(2) Another Nigerian study revealed that corporal punishment was responsible for 10% of eye injury cases in children.(3) The impact of ocular injury on ocular morbidity is quite enormous. Thus the need to evolve preventive measures for ocular injuries cannot be overemphasized. School authorities should make school environments safe for pupils and students. Teachers should be enlightened on the need to exercise extreme caution while correcting erring school children so as to prevent unnecessary harm to the students.

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