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WORLD MENTAL HEALTH DAY

October 10, 2009

MENTAL HEALTH IN PRIMARY CARE: ENHANCING TREATMENT AND PROMOTING MENTAL HEALTH

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EDITOR'S NOTE

World Mental Health Day, October 10th, 2009

The World Federation for Mental Health (WFMH) established World Mental Health Day in 1992; it is the only annual global awareness campaign to focus attention on specific aspects of mental health and mental disorders, and is now commemorated in over 100 countries on October 10 through local, regional and national World Mental Health Day commemorative events and programs.

The Theme of this year World Mental Health Day – 2009 is **"Mental Health in Primary Care: Enhancing Treatment and Promoting Mental Health"**. The theme of this year's global awareness campaign is intended to draw worldwide attention to the growing body of knowledge on integration which emphasizes the benefits of enhancing overall health and promoting mental health by integrating the primary healthcare services.

World Mental Health Day 2009 aims to provide consumers, families and advocacy associations around the world with accessible information on the mental health services available in the community and its integration in to primary health care delivery system.

Mental health disorders continue to be a serious and expensive global health issue, affecting people of all ages and from all cultures and socio-economic status. According to World Federation for Mental Health (WFMH), depression ranks fourth in terms of disability adjusted life years and will soon to be the second leading cause of disability worldwide. Out of the estimated 450 million people globally who have a mental health disorder, fewer than half receive the help they need. Many low-income countries have one or two psychiatrists for the entire population. Many developed countries have "carved out" mental health services from primary care health systems – giving mental health and illness less attention, less money, reduced options and services and little or no connection to the individual's total healthcare needs.

As always, the 2009 World Mental Health Day campaign will focus on the critical role that mental health advocacy, patient/ service user, and family/ caregiver organizations need to play in shaping this major general health and mental health reform movement. Such informed proactive and sustained advocacy will be necessary if the movement towards integration is to result in improved access to quality, adequate and affordable services for people experiencing mental illnesses and emotional health problems the world over.

However, it is right time for the health professionals to create an awareness campaign on the promotion of critical need to bring the mental health care to the higher level of importance in an effort at improving treatment and services for those living with mental health problems and their related health consequences.

S.S. Prabhudeva

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Cover: Courtesy WFMH 2009 World Mental Health Day, www.wfmh:org

Primary Care And Mental Health

WHO, back in 1948, defined "health" as 'A state of complete physical, mental and social well-being, and not merely the absence of disease or infirmity'.

Why is the topic of "Mental Health in Primary Care" of great enough importance to be selected as the theme for World Mental Health Day 2009? How does advocacy for integrating mental health care improve the possibility for better diagnostic, treatment and prevention of mental illnesses and mental health problems, and how would such integration serve to promote the improved mental and emotional wellness of people worldwide over the next 20 years?

Dr. Margaret Chan, Director General of the World Health Organization, in her message launching WHO's 2008 World Health Day, *"Primary Health Care: Now More Than Ever", stated that WHO's focus on primary health care grows both from her personal conviction, and from an increased demand from Member States. Dr. Chan noted that "such a demand displays a growing appetite among policy-makers for knowledge related to how health systems can become more equitable, inclusive and fair. It also reflects, more fundamentally, a shift towards the need for more comprehensive thinking about the performance of health systems as a whole." (WHO The World Health Report 2008 Introduction and Overview, p. 2)*

The concept that health systems might become more "equitable, inclusive and fair" is in itself solid rationale for inserting the needs of people living with mental health problems and disorders into the discussion of improving integrated primary health care. For centuries, mental health treatment, mental health promotion and prevention of disorders have not received the needed level of attention from governments, from the medical profession, and from the general public.

For centuries, the illnesses of the mind have been treated as a social issue – separate from any physical health issue. Now, though, most will agree that mental health disorders do not happen in isolation – in fact, they frequently occur in relation to or alongside other medical issues – such as heart disease, diabetes, cancer, neurological disorders and in response to many life situations. An individual's medical issues and life circumstances do not affect just one area of the body – but the body as a whole, each having an affect on the other. It would seem obvious that treating an individual's health in a holistic and integrated manner would achieve more positive outcomes and increased potential for recovery and productivity.

Primary care is the long-term relationship between a person and their doctor. The general doctor provides care for most of their health needs and coordinates additional health care services beyond the doctor's area of expertise. The United States Institute of Medicine gave this definition for primary care in 1996: *"Primary care is the provision of integrated, accessible health care services by clinicians who are accountable for addressing a large majority of personal health-care needs, developing a sustained partnership with patients, and practicing in the context of family and community." The following definition is derived from the 1960s-era: Primary care may also be thought of as a level of care in the larger health-care system, to be distinguished from secondary care (care provided by community-based specialists and local community hospitals) and ter-*

tiary care (care provided by specialists at regional or academic health centers). In non-industrialized nations with limited health resources, primary care may be provided by village health workers, nurse-auxiliaries, promotoras, community health advisors, barefoot-doctors, etc. (www.msm.edu/Centers_and_Institutes/National_Center_for_Primary_Care_(NCPC)/What_is_Primary_Care.htm)

Mental health care has usually been seen as a separate field, or a specialty along side the general healthcare system. It is the treatment of disorders of the mind. Neurological disorders starting in the brain were once seen as a separate matter, not needing any physical monitoring – but in recent years there has been greater recognition of the very important link between good mental health and good overall health. Mental disorders can have an effect on physical health and many physical ailments can induce more mental health issues. Also, it has been determined that those with severe and persistent mental illnesses are often twice as likely to have multiple physical health issues. Yet, even with this recognition of the inseparable relationship between mind and body and of the significant co-morbidity of mental and physical disorders, insufficient attention across the medical field continues to be given to healthcare systems that would, as Dr. Chan says "identify major avenues for health systems to narrow the intolerable gaps between aspiration and implementation" *(The World Health Report 2008, p.3)*.

To improve diagnosis, treatment and outcomes, health care providers must find new ways to build partnerships that create a more effective and collaborative practice that focuses on patient-centered, whole body care. It is imperative that mental health and mental disorders are included in plans and policies intended to promote the concept of "Primary Health Care: now more than ever" if the desired reform movement is to achieve the goal of improved health for all of the world's citizens and to create and sustain a truly comprehensive and integrated health care delivery system.

The 2009 World Mental Health Day global awareness campaign theme ***"Mental Health in Primary Care: Enhancing Treatment and Promoting Mental Health"*** is intended to address the continuing need to "make mental health a global priority," and stresses the all too-often neglected fact that mental health is an integral element of every individual's overall health and well-being. The campaign theme is intended to draw worldwide attention to the growing body of information and knowledge focusing on the integration of mental health into primary healthcare. This is a significant trend in shifting mental health diagnosis, treatment and care from the traditional separate but unequal mental health services delivery system into mainstream healthcare.

The engagement of the "end users" of mental health services, their families who carry much of the responsibility for helping people living with mental illnesses, and the advocates who attempt to influence mental health policies, is critical during this time of change, reform, and limited resources. The principal goals for the 2009 World Mental Health Day campaign are to inform and equip the grass roots mental health community to enable it to advocate for making mental health and mental illnesses integral to planning for appropriate health services. One of the primary advocacy concerns that must be addressed is the danger thatadequate and effective diagnosis, treatment and recovery of people living with mental illnesses will not receive a parity level priority within the general and primary healthcare system. It is the job of the global mental health advocacy movement to assure that this is not an unintended result of healthcare reform.

WMHDAY 2009 highlights the opportunities and the challenges that integrating mental health services into the primary health care delivery system will present to people living with mental disorders and poor mental health, to their families and caregivers — and to healthcare professionals. As always, the campaign will focus on the critical role that mental health advocacy, patient/service user, and family/caregiver organizations need to play in shaping this major general health and mental health reform movement. Such informed proactive and sustained advocacy will be necessary if the movement towards integration is to result in improved access to

quality, adequate and affordable services for people experiencing mental illnesses and emotional health problems the world over.

Advocates, families, professionals and policymakers across the global mental health sector must remember that this current movement to improve the way in which mental health services are delivered is not the first such reform effort. Lessons learned from the past tell us that achieving equality in how mental health services are addressed in countries around the world is not an easy struggle. The effective integration of mental health into primary care at a level of priority appropriate to the documented burden of care of mental illnesses will be a major undertaking in a time of global economic and social difficulty. Certainly, it is well past time for the world to listen and to act to improve mental health services and ready access to services by those experiencing serious mental health problems and disorders such as schizophrenia, anxiety disorders, bipolar disorder, and depression. ■

WFMH 2009 World Mental Health Day, www.wfmh:org

Seven Good Reasons For Integrating Mental Health Into Primary Care

1. **The burden of mental disorders is great:** Mental disorders are prevalent in all societies. They create a substantial personal burden for affected individuals and their families, and they produce significant economic and social hardships that affect society as a whole.

2. **Mental and physical health problems are interwoven:** Many people suffer from both physical and mental health problems. Integrated primary care services help ensure that people are treated in a holistic manner, meeting the mental health needs of people with physical disorders, as well as the physical health needs of people with mental disorders.

3. **The treatment gap for mental disorders is enormous:** In all countries, there is a significant gap between the prevalence of mental disorders, on one hand, and the number of people receiving treatment and care, on the other hand. Primary care for mental health helps close this gap.

4. **Primary care for mental health enhances access**: When mental health is integrated into primary care, people can access mental health services closer to their homes, thus keeping their families together and maintaining their daily activities. Primary care for mental health also facilitates community outreach and mental health promotion, as well as long-term monitoring and management of affected individuals.

5. **Primary care for mental health promotes respect of human rights:** Mental health services delivered in primary care minimize stigma and discrimination. They also remove the risk of human rights violations that can occur in psychiatric hospitals.

6. **Primary care for mental health is affordable and cost effective:** Primary care services for mental health are less expensive than psychiatric hospitals, for patients, communities and governments alike. In addition, patients and families avoid indirect costs associated with seeking specialist care in distant locations. Treatment of common mental disorders is cost effective, and investments by governments can bring important benefits.

7. **Primary care for mental health generates good health outcomes:** The majority of people with mental disorders treated in primary care have good outcomes, particularly when linked to a network of services at secondary level and in the community. ■

WFMH 2009 World Mental Health Day, www.wfmh:org

Abstract: A descriptive study was carried out in the Medical, Surgical Outpatient Department and in the General Medical, Surgical wards of the Christian Medical College, Vellore to assess the knowledge and the level of satisfaction expressed by the diabetic patients related to the information provided by the health personnel. Convenience sampling method was used for the study. A sample of hundred patients were chosen from the Outpatient Department and seventy five patients from the wards. Structured interview Questionnaire was used to assess the knowledge and the level of satisfaction. A five point scale was also used to assess the level of satisfaction. The findings of the study revealed that the knowledge of the Diabetes Mellitus Out Patients was inadequate and for inpatients it was moderately adequate. Both outpatients and inpatients were moderately satisfied with the information received. There was a significant relationship between the knowledge and the level of satisfaction related to the information provided by the health personnel.

Information and Patient Satisfaction

Lyza Richard*

Educating and supporting patients in managing their daily life with diabetes mellitus are the important goals of diabetes care today. The patient satisfaction measurement program which was conducted by the Quality Council in 1997 revealed information and education as an area for improvement for both inpatients and outpatients. The patient tends to be more satisfied when care providers give more information.

One objective in the case of diabetes patient is to assess and provide with the necessary information to the patients regarding the medical management and prevention of complications. It is through education that the diabetic clients are given their best defense against the complication of their disease.

Background: In Christian Medical College, Vellore there has been an increase in the number of diabetes mellitus patients attending medical, surgical outpatient department and admitted in medical and surgical wards.

More diabetics are being diagnosed these days so the nursing community is faced with the challenge of providing long term care and health information in managing the disease condition and in preventing complications. Health personnel are involved in client education to promote wellness, prevent illness and to promote optimal health.

The investigator was interested in this study as she felt the need to assess the knowledge of the diabetic patients related to disease and treatment and the level of satisfaction based on the information provided by the health personnel.

Objectives

1. To assess the knowledge and the level of satisfaction of outpatients and inpatients with diabetes mellitus related to information provided.
2. To assess the relationship of knowledge to the level of satisfaction
3. To identify the health personnel who provided the information
4. To develop a teaching module based on which the quality of information can be improved.

Method

The aim of the study was to assess the knowledge and the level of satisfaction of outpatients and inpatients with diabetes mellitus related to the information provided by the health personnel. A descriptive design was used for the study. The study was carried out in the medical, surgical outpatient department and

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general medical, surgical wards of Christian Medical College, Vellore.

The patients above 20 years of age, who were clinically diagnosed to have diabetes mellitus and those who had paid minimum three visits to the OPD were included in the study. Any staff who came as a patient with diabetes was excluded.

Structured interview Questionnaire to assess the knowledge and the level of satisfaction was prepared by the investigator after an extensive study of the related literature. Patient satisfaction scale was also developed by the investigator.

The validity and reliability of the instruments were established by conducting a pilot study and reviewed by experts in the field of research, medicine, nursing and statistics.

Data Collection Procedure

A sample of 100 outpatients and 75 inpatients were selected for the study. The data was collected for a period of six weeks. All selected patients were interviewed with the help of a structured interview Questionnaire which consisted of three sections: demographic data, questions to assess the knowledge related to the information provided by the health personnel and questions to assess the level of satisfaction. They were also assessed to identify the person who has provided the information.

For knowledge related question each correct answer scored one mark. The scores were interpreted as follows:

Inadequate knowledge - Below 50%
Moderately adequate knowledge - 51 – 75%
Adequate knowledge - 76 – 100%

The level of satisfaction assessment was made by a 5 point scale. The scoring ranges from 1 – 5 for each point on the scale respectively. Highly dissatisfied = 1 , Dissatisfied = 2, Neither satisfied nor dissatisfied = 3, satisfied = 4, Highly satisfied=5. The scores were interpreted as follows:

Dissatisfied = Below 50 %
Moderately satisfied = 51 – 75%
Highly satisfied = 76 – 100%

Ethical Consideration: The study was conducted after the approval of the dissertation committee and permission was obtained from the authorities in the field to conduct the study. The patients were informed about the study before the interview. Confidentiality was strictly maintained.

Results

Descriptive statistics was used to describe the demographic data, level of knowledge and level of satisfaction. The association between the knowledge and level of satisfaction was determined by chisquare test.

The sample size was 100 for outpatients. 46% of them were between 51 – 65 years of age. Males and females were 51% and 49% each respectively. The sample size was 75 for inpatients. More than half (53.3%) were between 51 – 65 years of age. Males and females were 65.3% and 34.7% each respectively. 79% of the outpatients and 82.7% of the inpatients were literates. 73% of the outpatients and 64% of the inpatients were unemployed.

The overall knowledge of diabetes mellitus outpatients was (47%) which was inadequate and inpatients (54.7%) moderately adequate. The level of satisfaction of the diabetes mellitus outpatients related to the information received was 81% and inpatients 81.3%. They were moderately satisfied.

The extent of information provided by the nursing personnel was only 13.3%

Table 1: Distribution of association between the overall knowledge and the level of satisfaction of outpatients (n = 100)

Knowledge	Dissatisfied (Below 50%)		Satisfied (51 - 100%)		X 2 Value	Significance
	No	%	No	%		
Inadequate (Below 50%)	17	32.1	36	67.9	10.78	0.0010
Adequate & moderately adequate (51-100%)	2	4.3	45	95.7		

The findings (Table 1) denote that there is a statistically significant association between the knowledge related to the information given and the level of satisfaction of outpatients ($p < .0010$).

Table 2: Distribution of association between the overall knowledge and the level of satisfaction of inpatients (n =75)

Knowledge	Dissatisfied (Below 50%)		Satisfied (51 - 100%)		X 2 Value	Significance
	No	%	No	%		
Inadequate (Below 50%)	12	37.5	20	62.5	10.97	.0009
Adequate & moderately adequate (51-100%)	2	4.7	41	95.3		

The findings (Table 2) denote that there is a statistically significant association between the knowledge related to the information given and the level of satisfaction of inpatients ($p < .0009$).

for outpatients and 24.9% for the inpatients. There was a significant relationship between the knowledge and the level of satisfaction in the outpatients ($P < .0010$) and inpatients ($P < .0009$).

Discussion

In this study it was observed that the diabetic outpatients had inadequate knowledge about the disease and treatment and inpatients had moderately adequate knowledge.

Similar findings were reported by Balachandra (1994) regarding knowledge and practice aspects in self care management among diabetes mellitus patients on prevention of selected complication. Over all 2.1% of the patients had adequate knowledge. 32.9% had moderately adequate knowledge and 60% had inadequate knowledge.

The study by Petterson (1998) to measure the knowledge, well being and treatment satisfaction of diabetic patients above 60 years of age revealed that the general well being score for patients on diet, medication and insulin was $p<0.001$. Treatment satisfaction score was $p<0.001$. The result of the study showed that the patients who had more knowledge and well being had more treatment satisfaction.

The present study revealed that the patients who had less knowledge about disease, medication, exercise, foot care and complication were dissatisfied with the information provided by the health personnel.

Implications of the Study

Information giving as a form of health education is crucial to improve the knowledge of the patient about the disease, to improve compliance and to reduce stress associated with diabetes.

There is a need for more communication and providing information for diabetes mellitus patients and the knowledge of the patients can be increased through health education in the wards and in the out patient department.

Conclusion

The diabetes mellitus patient's knowledge about the disease and treatment was inadequate for the outpatients and moderately adequate for the inpatients. Diabetes affects the client's life in many ways. Only when he is able to understand the disease as an integral part of his life that he will be able to be independent in self care. Information helps to dispel the sense of uncertainty and insecurity that goes together with most illnesses. The nurse needs to function as a facilitator and provide information to the patients regarding disease, treatment and home care.

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Nursing Informatics

Dinesh Selvam.S*

Informatics (*informatics* comes from the French word informatique which means computer science). *Informatics* is defined as **computer science + information science**. Used in conjunction with the name of a discipline, it denotes an application of computer science and information science to the management and processing of data, information, and knowledge in the named discipline. Thus we have, medical informatics, nursing informatics, pharmacy informatics and so on.

Hebda (1998 p.3), defines *nursing informatics* as "the use of computers technology to support nursing, including clinical practice, administration, education, and research."

American Nurses Association (ANA) (1994) has defined *nursing informatics* as "the development and evaluation of applications, tools, processes, and structures which assist nurses with the management of data in taking care of patients or supporting the practice of nursing."

Graves, J. R. & Corcoraii, S (1989) The Study of Nursing Informatics. Image: Journal of Nursing Scholarship, 27, 227-231. define nursing informatics as "a combination of computer science, information science and nursing science designed to assist in the management and processing of nursing data, information and knowledge to support the practice of nursing and the delivery of nursing care."

Framework of Nursing Informatics

The framework for nursing informatics relies on the central concepts of data, information and knowledge:

- **data** is defined as discrete entities that are described objectively without interpretation
- **information** as data thai is interpreted, organied or structured

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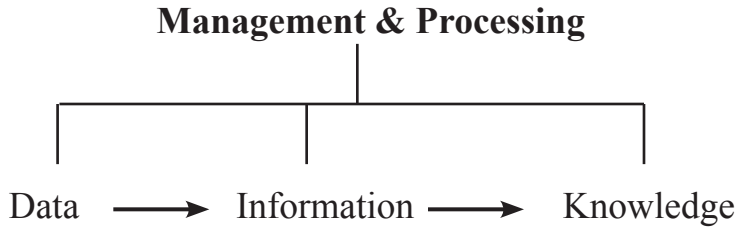
- **knowledge** as information that has been synthesized so that interrelationships are identified and formalized.

Resulting in decisions that guide practice

The *management and processing components* may be considered the functional components of informatics.



Example:

Data: 140 systolic

Information; 50 year-old male, day 3 of hospitalization, BP 140/70

Knowledge: Pt. demographics, record of BP readings, circulation system: anatomy & physiology, pharmacokinetics of ordered medication

Decisions: That guide practice

Application of Nursing Informatics

Nursing Informatics can be applied to all areas of nursing practice, which include: clinical practice, administration, education, and research. Below are some examples of how nursing informatics, *information technology and computers* are used to support various areas of nursing practice.

Nursing Clinical Practice (Point-of-Care Systems and Clinical Information Systems)

- Work lists to remind staff of planned nursing interventions
- Computer generated client documentation
- Electronic Medical Record (EMR) and Computer-Based Patient Record (CPR)
- Monitoring devices that record vital signs and other measurements directly into the client record (electronic medical record)
- Computer - generated nursing care plans and critical pathways
- Automatic billing for supplies or procedures with nursing documentation
- Reminders and prompts that appear during documentation to ensure comprehensive charting

Nursing Administration (Health Care Information Systems)

- Automated staff scheduling
- E-mail for improved communication
- Cost analysis and finding trends for budget purposes
- Quality assurance and outcomes analysis

Nursing Education

- Computerized record-keeping
- Computerized-assisted instruction
- Interactive video technology
- Distance Learning - Web based courses and degree programs
- Internet resources-CEU's and formal nursing courses and degree programs
- Presentation software for preparing slides and handouts-PowerPoint and MS Word

Nursing Research

- Computerized literature searching-CINAHL, Medline and Web sources
- The adoption of standardized language related to nursing terms-NANDA, etc.
- The ability to find trends in aggregate data, that is data derived from large population groups- Statistical Software, SPSS

Benefits of Computer Automation in Health Care

Many of these benefits have came about with the development of the Electronic Medical Record (EMR) which is the electronic version of the client data found in the traditional paper record.

EMR benefits include:

Improved access to the medical record. The EMR can be accessed from several different locations simultaneously, as well as by different levels of providers.

Decreased redundancy of data entry. For example, allergies and vital signs need only be entered once.

Decreased time spent in documentation. Automation allows direct entry from monitoring equipment, as well as point-of-care data entry.

Increased time for client care. More time is available for client care because less time is required for documentation

and transcription of physician orders.

Facililation of data collection for research. Electronically stored client records provide quick access to clinical data for a large number of clients.

Improved communication and decreased potential for error. Improved legibility of clinician documentation and orders is seen with computerized information systems.

Creation of a lifetime clinical record facilitated by information systems.

Other benefits of automation and computerization are related to the use of ***decision support software,*** computer software programs that organize information to aid in decision making for client care or administrative issues; these include:

- Decision-support tools as well as alerts and reminders notify the clinician of possible concerns or omissions. An example of this is the documentation of patient allergies in the computer system.
- Effective data management and trend-finding include the ability to provide historical or current data reports.
- Extensive financial information can be collected and analyzed for trends. An extremely important benefit in this era of managed care and cost cutting,
- Data related to treatment such as inpatient length of slay and the lowest level of care provider required can be used lo decrease costs.

Role of the Nursing Informatics Specialist

Because of the increased importance of computers and information technology in the practice of professional nursing, a new role has emerged, the Nursing Informatics Specialist (NIS). The NIS is a nurse who has formal education, certification and practical experience in using computers in patient care settings. The American Nurses Association (ANA, 1994), lists several functions of the NIS:

Theory development: The NIS contributes to the scientific knowledge base of nursing informatics.

Analysis of information needs: The identification of information that nurses need in order lo accomplish their work; client care, education; administration, and research.

Selection of computer systems: The NIS guides the user in making informed decisions related to the purchase of computer systems.

Design of computer systems and customizations: The NIS collaborates with users and computer programmers to make decisions about how data will be displayed and accessed.

Testing of computer systems: Systems must be checked for proper functioning before they are made available tor use in patient care.

Ongoing maintenance and enhancements: The NIS makes sure the computerized system functions properly and explores possible enhancements to the system that will better serve the users and the patients.

Identification of computer technologies that can benefit nursing: The NIS must keep abreast of the changes in the fields of computers and information technology, including new hardware and software that will benefit the nurse and patient.

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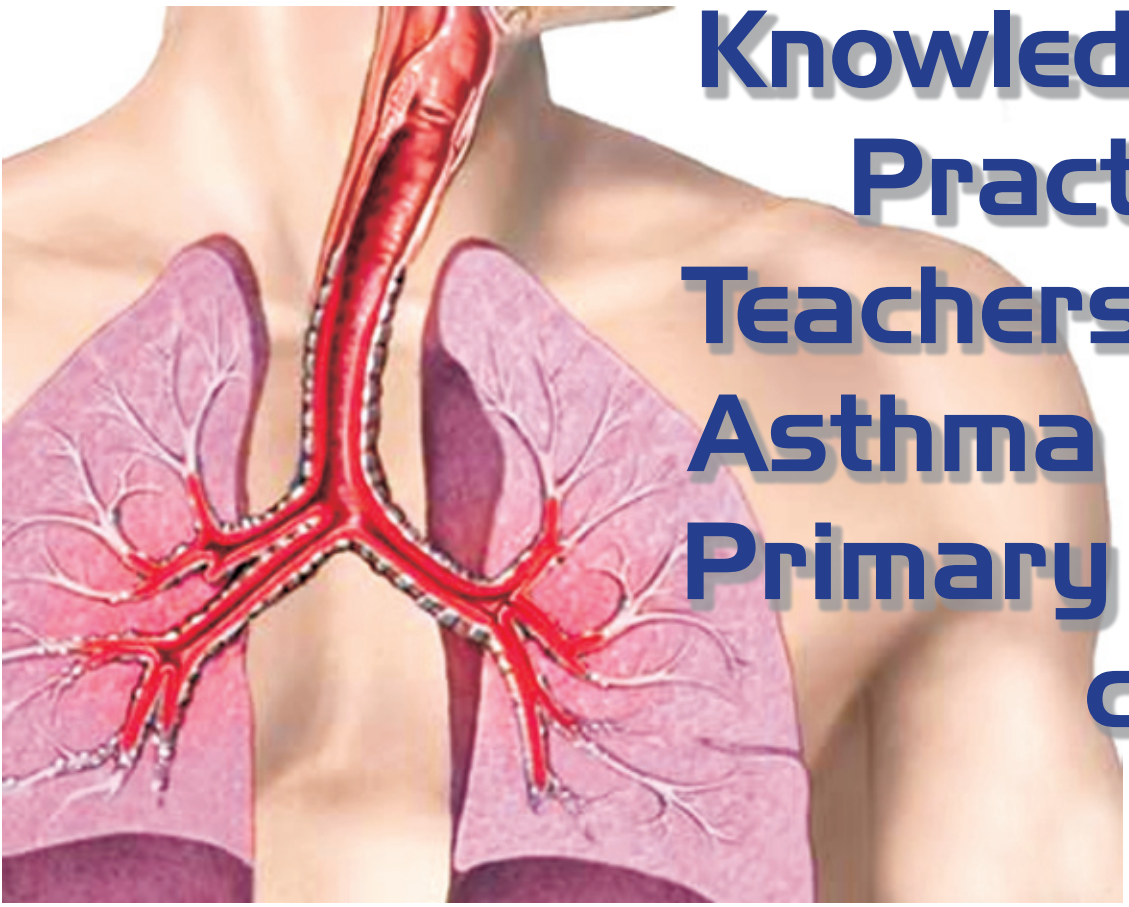

Knowledge and Practices of Teachers about Asthma among Primary school children

Upendra Singh*

A study to assess the knowledge and practices of primary school teachers regarding Asthma among Primary School children with a view to develop self instructional module in selected schools of Begur PHC area, Bangalore South.

Asthma is the most common chronic disease of childhood. Its incidence is the highest in primary school children and it is the principal cause of school absenteeism and reduced participation in school activities. Increasing prevalence of childhood asthma in India and the encouragement of self-management practices mean that many children experience asthma symptoms and use asthma medication whilst at school. The knowledge and practices about asthma held by teachers is likely to have a major impact on how well a child is able to manage asthma whilst at school.

Children spend most of the day at school. Physical education activities may put school children with asthma at risk, since attacks are likely to occur during or immediately after exercise. It is therefore important that these children are given proper asthmatic management either in the form of preventive measures or in case they develop symptoms at school. Most schools do not have permanent full time nurses, thus placing the responsibility for daily asthma management of students with asthma by non-medical staff and teachers.

It is important for teachers and staff to be aware of the symptoms, triggers and the management of asthma in the school environment. Asthma is the most common reason for school non-attendance and hospital admission in school age children. Some studies revealed that the teachers had limited knowledge about asthma in children and recommended that instructions about asthma should be given to all primary school teachers during their teacher training courses. Asthma can affect all ages of people, including children; it can however be controlled by medications. Proper education and knowledge of school teachers about the disease is essential, which will help in management and control of the disease in school settings.

Need for the study

Teachers spend most of their day time in the classroom, there may be little opportunity for communication with the school doctor or nurse when they visit the school. There is clearly a need for

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more meetings to be facilitated between teachers and the health professionals. Schools do not currently have access to school health services and make a variety of medical arrangements for their pupils, including employing general practitioners and nurses. Schools need to receive more information about asthma, both to enable them to cope more ably with their asthmatic pupils and to alleviate the anxieties of teachers. Asthma is bound to form part of every teacher's health experience with the children in their charge.

The increasing number of children with asthma in the schools necessitates an examination of the preparedness of teachers in the care and management of children with asthma. Teachers are not adequately prepared to assist children with the management of asthma in the classroom. It is important that teachers should be able to recognize symptoms of an asthmatic attack or take the necessary precautions to avoid such an attack. Asthma can be life threatening; it is essential to assist those involved in monitoring and managing children with asthma, and provide timely and appropriate care. In this way, the goal of having a child with asthma, live as normal a life as possible, including all school activities, can be realized.

There is need to train teachers and provide an agreed joint education and health policy on managing Asthma in schools. A healthy student is a student ready to learn. Teachers are important figures in the lives of young people; their beliefs about student health concerns are often solicited. However, management of asthma in schools and the role of school teachers to adopt in this condition has only recently been explored. There is a need to provide school teachers with education on asthma and its management.

Objectives

- To assess the knowledge of primary school teachers regarding Asthma among primary School children.
- To assess the practices of primary school teachers regarding Asthma among primary School children.
- To determine the relationship between knowledge and practices with selected demographic variables.

Hypothesis

H1: There will be significant relationship between the knowledge and practices of Primary School teachers regarding Asthma among Primary School children.

H2: There will be significant association between selected demographic variables, knowledge and practices of Primary School teachers regarding Asthma among Primary School Children.

Research Design: Non-experimental descriptive design.

Population: Primary school teachers.

Sample & Sample Size: Sixty school teachers at selected primary schools of Begur PHC area, Bangalore south.

Sampling Technique: Convenient sampling technique and simple random technique.

Sampling Criteria

Inclusive Criteria

- School teachers who are working in Primary schools at Begur PHC.
- Teachers willing to participate in the study.
- Teachers available at the time of data collection.

Exclusive Criteria

- Primary school teachers who are not willing to participate in the study.
- Primary school teachers who are absent at the time of data collection.

Description of the tool: The tool for data collection has been classified into two parts i.e., Part-I and Part- II

PART - I: It deals with demographic data of primary school teachers

PART - II: Classified into Part-II A and Part-II B.

- **Part-II A** – Consists of 23 items on meaning of Asthma, causes and predisposing factors of Asthma,

signs and symptoms of Asthma, treatment and preventive measures of Asthma and role of teachers in "Asthma Management" related to knowledge of primary school teachers.

- **Part-II B** – Consists of 17 items on signs & symptoms of Asthma, treatment and preventive measures, role of teachers in Asthma Management related to practice of primary school teachers regarding asthma among primary school children.

Each question had one possible correct response. Each correct answer is assigned a score of '1' and wrong answer is assigned a score of '0'.

Process of Data Collection

The researcher collected data after obtaining official permission from concerned authorities and teachers. The data collected by administering the structured questionnaire on knowledge and practice regarding asthma among primary school children. Approximately 40 to 45 minutes were taken by each teacher to complete the questionnaire.

Data Analysis and interpretation

- The data collected was organized and entered in the master sheet. Descriptive statistics were used for summarizing empirical information and inferential statistics, Chi – square was used to find out the association between knowledge and practices with selected demographical variables.
- Data was analyzed by applying descriptive and inferential statistics, Mean Standard Deviation and mean percentage was used to describe the variables.
- Teachers who had scored above 75 percent were categorized as having high knowledge, those with 51-75 percent as having moderate knowledge and those who scored below 50 percent were categorized as having inadequate knowledge.

The finding of Table – 1 shows that 33 teachers (55 percent) have moderate (51 – 75 percent) knowledge level and 27 teachers (45 percent) knowledge level was inadequate (<50 percent), whereas no one had adequate (>75 percent) knowledge.

The finding of Table-2 shows that in majority of 37 teachers (61.7percent) practice level was low (<50 percent) and only 23 teachers (38.3 percent) showed moderate (51 – 75 percent) practice level, whereas no one had high (>75 percent) practice level.

The result of Table-3 reveals the mean knowledge and practice of teachers on Asthma among school children. The findings show that in knowledge aspect max score is 23 and Range score is 7 – 17, mean is 12.05, mean percentage is 52.4 and S.D. percentage is 12.4.

Findings of the Study:

TABLE – 1 Knowledge Level of Primary school teachers regarding Asthma among primary school children

N=60

Knowledge Level	Respondents	
	Number	Percent
Inadequate (< 50%)	27	45.0
Moderate (51-75 %)	33	55.0
Adequate (> 75 %)	0	0.0
Total	60	100.0

TABLE – 2 Practice Level of Primary school teachers regarding Asthma among primary school children

N=60

Knowledge Level	Respondents	
	Number	Percent
Low (< 50%)	37	61.7
Moderate (51-75 %)	23	38.3
High (> 75 %)	0	0.0
Total	60	100.0

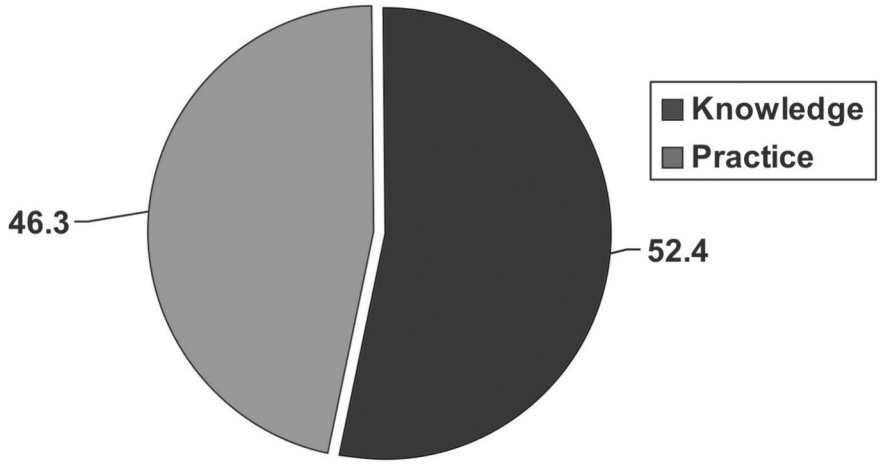

Fig-1. Mean Knowledge and Practices of Teachers on Asthma among school children

Conclusion

Results of the study revealed a positive correlation between knowledge and practice among respondents, + 0.616 significant at P < 0.05 level. Hence Hypothesis H1 is accepted and there was significant association between knowledge and practice level with age and basic educational level. Further it was observed that only experience and income were significantly associated with practice level at P < 0.05 level. Hence Hypothesis H2 partly accepted.

Primary school teachers had moderate knowledge and low practices regarding Asthma among school children. They had higher knowledge score in role of teachers, 65.0 percent, and least knowledge score in aspect of causes and predisposing factors, that

TABLE – 3 Mean Knowledge and Practice of Teachers on Asthma among school children and their correlation

N=60

No.	Aspects	Max. Score	Range Score	Response			Correlation
				Mean	Mean (%)	SD (%)	
I	Knowledge	23	7-17	12.05	52.4	12.4	+ 0.616*
II	Practice	17	4-12	7.87	46.3	13.6	

*** Significant at 5 % level, Table value 'r' = (0.05,58df) = 0.255**

Practice aspect max score is 17 and Range score is 4 – 12, mean is 7.87, mean percentage is 46.3 and SD percentage is 13.6.

- Correlation coefficient between knowledge and practice (r) = + 0.616* significant at 5% level. Table value 'r` = (0.05, 58 df) = 0.255 lesser than obtained value. It indicates that if the teacher's knowledge level will increase it will result in better practice.

TABLE – 4 Association between selected Demographic variables with Knowledge and Practice level of teachers on Asthma among school children

Sl.No.	Demographic characteristics	Knowledge	Practice
1.	Age	S*(6.88)	S*(11.09)
2.	Sex	NS	NS
3.	Marital status	NS	NS
4.	Basic education	S*(11.79)	S*(6.92)
5.	Professional education	NS	NS
6.	Experience	NS	S*(8.78)
7.	Income	NS	S*(8.36)

NS: Non-significant, * Significant at 5 % level

is, 45.6 percent. Teachers had higher practice score in role of teachers, 48.8 percent, and least practice score in aspect of signs and symptoms, which is 31.7 percent. Positive correlation coefficient (r) = + 0.616; indicating higher the knowledge better was the practice.

Implications

- The study emphasizes the significance of education on Asthma among school children to teachers, in-service education for nurses with advanced knowledge regarding Asthma disease should be organized.
- Planned health education programme by the health professionals should be made an ongoing process in the schools.
- In India only few research studies have been done on knowledge and practices of primary school teachers regarding Asthma among school children. Nurse administrators can plan programs in educating community with available resources and implement cost effective measures.

Recommendations

- A study may be conducted to evaluate the effectiveness of self instructional module prepared on the topic.
- A similar study can be conducted on parents of school going children.
- A comparative study can be done in rural and urban setting.
- A study can be conducted among school teachers in different aspects of health promotion of children.

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Self Evaluation Skills of Senior Nursing Students

Venkatesaperumal R*, Clara JJ, Isac C*** and Amirtharaj AD******

Self Evaluation Skills of Senior Nursing Students on various aspects of Nursing Process and Professional Relationship

Clinical education is an integral component of undergraduate nurse education, in which clinical teachers facilitate students' application of theoretical classroom knowledge into the clinical practice setting. The teacher here is not only a facilitator but also invariably serves as an evaluator as well. The authors of this article cumulatively experienced one of the following feedbacks from students who were handed over their grades at the end of a clinical rotation:

'It's not the grade I expected from you…..'

'I have put the best of my efforts in this clinical rotation…..'

'You never told me that I was poor in my assessment skill during my posting…'

'I did the skill in your absence…'

'These comments do not mirror my performance…'

Nursing profession has created vibrant changes in all the facets of its existence. Clinical evaluation is an area which is highly seasoned with subjectivity and is directed from the teacher to the student. In the changing scenario, where student centered curriculum is the highlight, self evaluation not only fosters behavioral changes in nursing students but also protects the patient against poor or inadequate care.

Evaluation signals the student's level of performance and sets the stage for future achievements or decline. One of the challenges of evaluation is that, without careful attention, a well-meaning preceptor can find himself or herself in an uncomfortable and unpleasant situation. A strategy that is sometimes used to make evaluations "painless" is to give all learners a high grade in spite of their performance (Harkless, et al).

Evaluation proves itself to be towering landscape and hold the key for enhancing the quality of learning experiences. To overcome these prevailing issues, teachers today are experimenting alternatives to traditional evaluative strategies. Performance assessment, portfolio collections, classroom observation, peer assessment and self evaluation are some of the alternate methods. The accumulating research evidence channels the spot light on self – evaluation as an authentic assessment which has an optimistic impact on the learning of students and their teachers (Rolheiser & Ross, 1996).

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Self-evaluation is defined as students judging the quality of their work, based on evidence and explicit criteria, for the purpose of doing better in the future. Rolheiser & Ross (1996) claim that self-evaluation is a potentially powerful technique because of its impact on performance through self-efficacy and increased intrinsic motivation. Evidence about the positive effects of self-evaluation is particularly convincing for difficult tasks (Maehr & Stallings, 1972; Arter et al., 1994) especially in academically oriented schools (Hughes et al., 1985) and among high need pupils (Henry, 1994).

Self-evaluation is in clinical practice as students can identify their progress towards meeting specific goals. Techniques include journaling, videotape and self-rating scales. Self-evaluation requires skill and practice and for this reason the process needs to be taught in a systematic manner at the beginning of the instructional period and implemented on a continuous basis. The literature describes the process of self-evaluation as the learner taking the responsibility to set goals and to determine achievement of those goals (Schweer, 1976; Best, Carswell and Abbott, 1990; Reilly and Oermann, 1992). In nursing, however, where there is an expectation of adherence to standards for safe practice, the process of self-evaluation can be learnt by working collaboratively with an experienced nurse educator and by setting appropriate learning goals based on the specific clinical competencies and performance criteria (Best, Carswell and Abbott, 1990). This collaborative approach allows the student to gain the confidence to self-evaluate and allows time for the student to socialize into the profession. The locus of control will eventually shift from teacher to learner as the learner gains more confidence in self-evaluation.

Senior nursing students are capable of evaluating themselves if guided properly. When given a tool to evaluate self, students are able to make a self-judgment that they are not perfect and that there are grey areas in their performance which requires remodeling and strengthening.

Thus, the goal of self-evaluation is to have students work towards an independent state where they will eventually be able to judge and act upon their own behaviors. This is based on studies which suggest that a person, who participates in self-evaluation and creates his/her own learning objectives and solves his/her own problems, ultimately controls his/her own life (Best, Carswell & Abbott, 1990).

Contrasting the above literature Best & Maureen (1990) identified that self-evaluation skills are not taught to nursing students in a systematic way. She also emphasizes that collaborative evaluation techniques provide nursing educators with a framework for teaching students essential self-evaluation skills.

These concrete facts coupled with the researchers' personal experience with students who face difficulty accepting grades, created the path way for this study to be conducted. This study was undertaken to describe the perceptions underpinning the nursing students self rated scores for the application of nursing process and their personal and relationship skills provided to their adult patients during their clinical posting at SQUH.

Problem Statement

A study to explore the self evaluation skills of senior nursing students on various aspects of nursing process and professional relationship

Objectives

1. To assess the self evaluation skills of senior nursing students on various aspects of nursing process
2. To assess the self evaluation skills of senior nursing students on their personal development and relationship skills

Methods

The conceptual framework for the

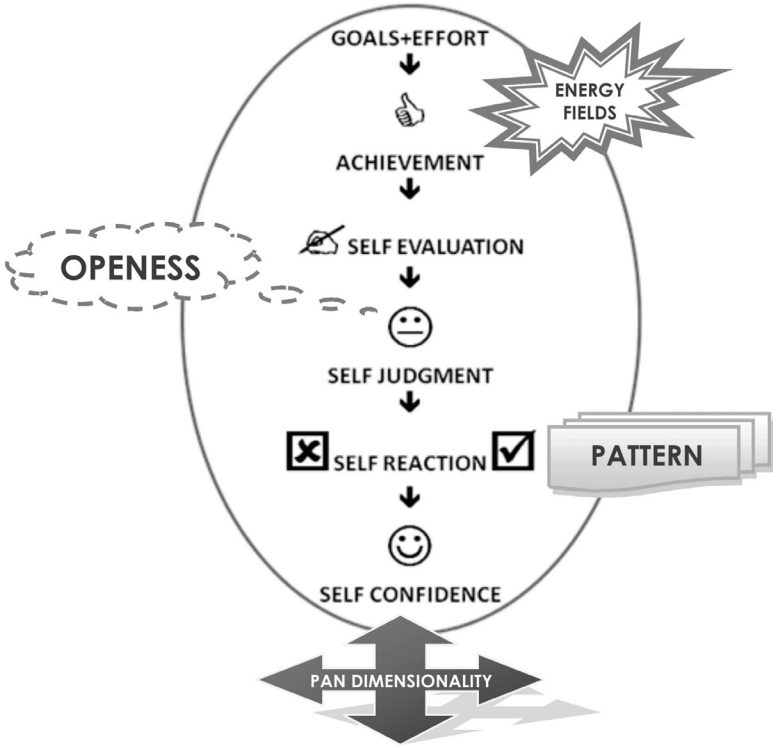

Fig 1: Conceptual Framework Based on Rolheiser (1996) Theoretical Model Behind Self-Evaluation and Rogers' Science of Unitary Human Beings (1992)

study was adopted from Rolheiser (1996) theoretical model behind self-evaluation and Rogers' Science of Unitary Human Beings (1992). Research indicates that self-evaluation plays a key role in fostering an upward cycle of learning. Incorporating these models to the present study, the energy fields within an individual help the person to set goals and to identify the steps (criteria) to achieve them. Once the plan focused on the goals is implemented, the students self-evaluate their caring process based on the anticipated targets. This helps them to make a self-judgment on their performance. These phases of realization / rating of one's behavior is equated to the openness in Roger's model. A feedback discussion between the teacher and the students enlightens the areas of learning which are to be credited / reinforced. This pattern which is established is compared to self reaction by Rolheiser. Ultimately the student is not only clinically boosted with self-evaluation, but has also gained organizing, delegating, teaching, counseling, reporting and documenting skills through this process. This is worded as pan-dimensionality by Rogers.

A descriptive approach was undertaken. The study was conducted among 37 final year baccalaureate nursing students. This was one of the online projects that the students undertook in the unit professional development and commitment. They were explained about the self evaluation process and the components within the tool prior to their care period. They were exposed to patient care as a part of their clinical training for a period of one month and the students gave their self evaluation report. It was clearly mentioned that it is for their development and they were ensured that there are no grades attached to this endeavor. Confidentiality and anonymity of the findings were also emphasized to them.

Ellis & Hartley (2004) self evaluation tool was used. This tool is broadly classified into 5 major categories with varying number of evaluative statements (assessment of patient-8; planning for patient care-9; intervention-10; evaluation-4; personal growth & relationship-13). The total score obtained by the students was interpreted based on the grading system practiced in the Sultan Qaboos University. The scoring is given as follows 87 – 100%: Excellent self appraisal; 73 – 86%: Good self appraisal; 60 – 73%: Mediocre self appraisal; < 60%: Poor self appraisal.

Discussion

The first objective of the study was to *assess the self evaluation skills of senior nursing students on various aspects of nursing process.* The analysis revealed that the students

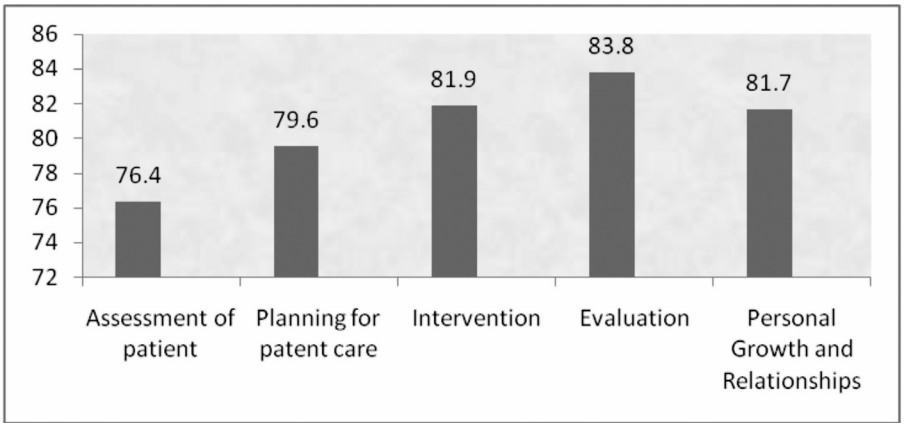

Figure 2: Percentage Distribution of Self Evaluation Category Score

had rated their performance as good in all dimensions of their performance. Among the categories, their evaluative skills (83.78%) dominated, closely followed by intervention skills (81.89%). Planning for patient care was not so far behind (79.35%) in rating. However, their assessment skills (76.35%) were towards the lower end of the continuum of good performance. This distribution of scores (76.35% to 83.78%) reveals that students are able to differentiate their level of performance in various arenas of clinical practice. This finding is resonated in the positive effects of self-evaluation particularly for difficult tasks (Maehr & Stallings, 1972; Arter et al., 1994).

Table 1: Percentage Distribution of High & Low Scored Statements in 'Assessment of Patient' Category	N	%
Do I listen closely to the patient and attend to what is being said?	33	89.2
Do I separate relevant from irrelevant?	33	89.2
Have I recognized problems quickly so that they did not become worse through inattention?	24	64.9

Table 2: Percentage Distribution of High & Low Scored Statements in 'Planning for Patient Care' Category	**N**	**%**
Are my written plans clear, concise and reasonable to carry out?	36	97.3
Are my assumptions correct?	23	97.3
Do I employ principles from biologic and social sciences in planning?	23	62.2

The analysis of individual components of nursing process reveals that the students have obtained an overall score of 76.35% in Assessment component of nursing process.

The low-lying scoring pattern in assessment can be equated to the lack of excellencies to constantly search the available resources for data (67.6%), obtain measurable information (67.6%) and disintegrate personal view points (67.6%). The acceptance of these difficulties clearly portrays that students lack a framework in collecting and organizing information needed for planning nursing care. The clinical teachers / preceptors are placed in a vital situation to tutor their students to consider nursing theories as a conceptual framework in procuring and refining assessment data. A theoretical approach helps practicing nurses not to be overwhelmed by the mass of information confronting them and to progress through the nursing process in an orderly manner (Chitty, 2005).

In spite of these lags, students claim that they provide a listening ear to their patients' vows and concerns (89.2%). This positive reflection conveys the students' patient centered attitudes. A citation in Berman, et al (2008) by Toni Stamps from University Medical Center, Tuscon, is quoted as *"I have found that if a person is feeling anxious, demanding and needy, I can minimize these behaviors by taking a little extra time at the beginning of my shift to address any issues he or she has or just to listen"* is congruent with the students behaviors in these aspects.

Planning for patient care also demonstrated the same discrepancy. The higher scores were observed in the students' belief that they are able to write plans which are clear, concise and reasonable to carry out (97.3%). This perceived asset of the students claims their competence to effectively and efficiently consider the health environment in preparing patient-focused plans.

However, this range is not depicted in their ability to integrate biologic & social sciences in planning (62.2%) nor in construction of apparent assumptions (62.2%). These areas of weakness implies that by self evaluating students are able to identify that, their focus in planning is narrow and requires comprehensiveness. This insight will not only widen their critical thinking but will also facilitate the utilization of their previous learning experiences. This awareness of the students has been elaborated as cognitive benefits of self evaluation which urges oneself to reflect, construct and self-regulate by Davies and Wavering (1991); Herman (1992).

The aptitude of the students to judge themselves as 'good' in the intervention category is highlighted in their safety standards (89.2%) and therapeutic communication skills (89.2%). This implies to the confidence they

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Depression and Cognitive Impairment among old age people

Usha V.K.*, Lalitha K. and Padmavathi *****

Ageing is a natural phenomena and an inevitable process. Every living being born, develop, grow old and dies. Ageing is a process of gradual change in physical appearance and mental situation that causes a person to grow old.

According to 2001 census, the elderly population in India was 75.93 million, that is, 7.43% of the total population. Absolute number of the aged over 60 in India is expected to increase from 76 million in 2001 to 137 million in 2021 (Sinha, 2004). Among the total elderly population, those who live in rural areas constitute 78 percent (Shiva,2002).

In Kottayam district the total population of elderly was 7.75%. (census report, 2001)

Elderly suffering from acute or chronic illness showed higher prevalence of depression, 61.5% (Hughes et al, 1992).

Geriatric patients with depression are more likely to have somatic complaints. Significant number of depressive syndromes may represent individuals with dementia. (Shiva,2002).

According to Venkoba Rao (1996) depression is becoming a public health problem. In an ICMR survey conducted in 1984-1985 of elderly persons over 60 years of age attending geriatric clinics in rural India, psychiatric problem was found to be 85%. About 6% the population meets the criteria for major depressive disorder and 20% of those will have symptoms that persist beyond two years

Jain & Aras (2007) conducted a study on 196 persons above the age of 60 years in Mumbai. A sample size found that 49.5% of the study population was having depression and among them

Table 1 : Number of elderly in Kerala

Kerala	1961	1991	2001
Elderly aged 60 and above	1 million	2.6 million	3.3 million

Source : (Zachariah and Rajan, 2001)

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57.8% were females. The significant variables associated with depression were poor socio-economic status, marital status, non-working or dependency and illiteracy. Depressed elderly were inclined towards substance abuse, 58.13% had disturbed sleep patterns and mostly suffered from acute or chronic illness ($P<0.05$).

Based on these findings, it was decided to conduct a community survey to assess the level of depression and cognitive impairment among old age people.

Statement of the problem

The level of depression and cognitive impairment among old age people living in Arpookara Panchayath, Kottayam District.

Objectives

1. To identify the general health status of the old age people in the community
2. To assess the level of depression among old age people living in the community.
3. To find out the degree of cognitive impairment among old age people in the community.
4. To find out the correlation between depression and cognitive impairment.

Assumptions

Old age people may be at risk of developing depression and cognitive impairment.

Materials and methods

Research design

A descriptive survey design was used.

Setting

The study was conducted in ward 14 of Arpookara Panchayat, Kottayam.

Population

People above the age of 60 years.

Sample and sampling technique

Sample consisted of 150 old age people of both sexes living in ward 14 of Arpookara Panchayath and a stratified ramdom sampling technique was used.

Inclusion criteria

- Old age people living in ward 14 of Arpookara Panchayat, Kottayam for a minimum period of 6 months continuously.
- Old age people who can comprehend Malayalam and those who are willing to participate.

Exclusion criteria

- Houses found locked that belonged old age people during data collection time.
- Old age people with severe psychiatric problem, hearing and vision problem

Research Tool

Tool I

Semi structured interview schedule on demographic characteristics and general health problems of old age people.

Tool II

Mini Mental Status Examination (MMSE) (Folstein, 1975) was used to find out the degree of cognitive impairment of the subjects. This tool consists of eleven items with a total score of thirty. A score of 24-30 indicates no cognitive impairment, score of 18-23 indicates mild cognitive impairment and score of 0-17 indicates severe impairment .

Tool III

Geriatric Depression Scale (GDS) (Brink and Yesavage,1983), a 30-item self rated scale used to evaluate depression in the old age people. Each item of the GDS is answered “Yes” or “No”. There are 20 items which indicate depression when answered “Yes” and 10 items which indicates depression when answered “No” (items 1,5,7,9,15,19,21,27,29,30). Non-depressive answers score zero and do not add to the total score. A score of 0-4 indicates no depression, 5-10 indicates mild depression and the score 11-30 shows severe depression.

Data collection process

The investigator conducted a survey of a total of 120 houses using a semi structured interview schedule after giving a brief explanation about the study. The collected data were analyzed and presented by using descriptive and inferential statistics.

It is observed from Table 4 that majority (94.7%) of the elderly are suffering from one or more physical illnesses

Results

Demographic Characteristics of the old age people

Among the subjects, majority 33.1 and 32.4 percentage of the elderly are suffering from arthritis and hypertension respectively.

Discussion

The present study was focused on depression and cognitive impairment of the old age people in the community. It was found that majority of the population (49.3) belongs to the age group of 60 to 70 years .Kerala is clearly ahead of others with 7.2% of its population already in the age group of 65 years and over (Shaji and Dias, 2006). Kerala is going through a period of rapid demographic aging due to improved medical facilities, reduced child mortality rate, low fertility rate etc. Indian aged population is currently the second largest in the world (Sinha, 2004).

Another finding was that among the old age people, females constitute 59.3 % whereas males were about 40.6 %.

Table 2:Frequency distribution of study subjects based on age, sex and religion. N=150

Demographic variables	Frequency	Percentage
Age in years		
60-70	74	49.4
71-80	46	30.7
81-90	28	18.6
>90	02	1.3
Sex		
Male	61	40.6
Female	89	59.4
Religion		
Hindu	81	54
Christian	69	46
Muslim	0	0

Table 2 indicates that the majority of the population (49.4 %) belongs to the age group of 60-70 years, more than half of the old age people (59.4 %) are females and 54 % of the subjects belong to Hindu religion.

Table 3: Frequency and percentage distribution of old age people with respect to their education, occupation and source of income. N=150

Demographic variables	Frequency	Percentage
Education		
Illiterate	12	8.0
Primary	112	74.6
High school	22	14.6
Higher secondary/PDC	02	1.4
Graduates	02	1.4
Occupation		
Unemployed	129	86.0
Coolie/Agriculture	10	6.6
Private	4	2.8
Retired Govt.Employee	7	4.6
Source of Income		
Govt.pension	7	4.6
Widow pension	17	11.4
Agricultural worker's pension	32	21.3
Occupation/ Self employment	14	9.4
Nil	80	53.3

Table 3 indicates that the majority of the old age people (74.6 %) have primary education, 86 % of them were unemployed and majority (53 %) have no income at all.

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Near Drowning: A Case Report

Lilly Prasad*, Ruma Nayak, Mary Anbarasi***, Shanthi Gladston****, Margaret Manoharan***** and Menaka Raghuraman******

Abstract: ***Drowning ranks second most common cause of accidental death in children. Most cases involved children who are helpless in water such as inadequately attended in or near swimming pools. Nurses often have difficulty in relating to the parents if obvious neglect has precipitated the accident and subsequent problems.***

This article describes the essential highlights of drowning and an interesting case report of an eight year old schooler and four year old preschooler who presented with near drowning and was successfully managed by the team in the department of Pediatric Emergency Service and the Intensive Care Unit of the Christian Medical College, Vellore.

Drowning is a life threatening emergency that results in either a slow or rapid replacement of fluid in the lungs. This in turn causes gasping and aspiration which leads to cardiopulmonary arrest due to asphyxia in 4 to 6 minutes. In order to save the life of children prompt action and meticulous care is necessary to prevent the mortality related to drowning.

Epidemiology

Incidence

Drowning occurs more than 4 times in males than in females. Highest rate is seen among children between 2 to 3 years of age. A study done by Anuradha Bose (2000) in Kaniyambadi block, served by the Community Health Department of Christian Medical College and Hospital, Vellore, reveals that there were a total of 288 deaths in the age group between 1 to12 years and

Epidemiology

Statistics of Drowning Cases, Child Health Department of CMCH, Vellore.

YEAR	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Cases	1	5	7	3	6	7	6	8	10	9
Deaths	0	0	1	0	0	0	0	0	0	0

Reader, Paediatric Nursing, College of Nursing, CMC, Vellore, **Professor, Paediatric Nursing, ***Professor, Paediatric Nursing, ** Jr. Lecturer, Paed. Nursing,*****Associate Professor, Paediatric Nursing and ******Junior Lecturer, Paediatric Nursing.*

drowning was the single largest cause of death in this group with a total of 58 death.

Definition of Terms:
Drowning Death from asphyxia while submerged regardless of whether fluid has entered the lungs.
Near drowning Survival at least 24 hours after the submersion in a fluid medium.

Accidental drowning can be decreased if children are given training in swimming skills at a younger age. Children must swim under supervision. The personal flotation devices should be made available in swimming pools.

Pathophysiology In drowning asphyxia supervenes within a matter of 1 to 2 minutes after complete submersion and cardiac arrest occurs in the next 2 to 5 minutes.

Events that occur in drowning are as follows:

After submersion, water is drawn into the stomach and lungs. The water that is drawn into the lungs excites coughing paroxysms leading to the expulsion of air from the lungs and its place is taken up by the water. When all the air in the lungs has been replaced by the water, the victim sinks to the bottom. During these stages reflex apnea due to laryngospasm sets in leading to hypoxia, hypercapnoes and acidosis. Subsequently, hypertension, bradycardia and raised central venous pressure occur, followed by cardiac arrhythmias, hypertension and exhaustion from efforts to keep above the surface of water.

The final outcome may be cardiac arrest, cerebral dysfunction which leads to convulsion and dilated pupils and renal tubular necrosis. The water that has been swallowed may be absorbed leading to hyponatremia or may be vomited and aspirated into the lungs. The terminal apnea which ensues leads to more inhalation of water resulting in pulmonary and cerebral edema.

Clinical Manifestations

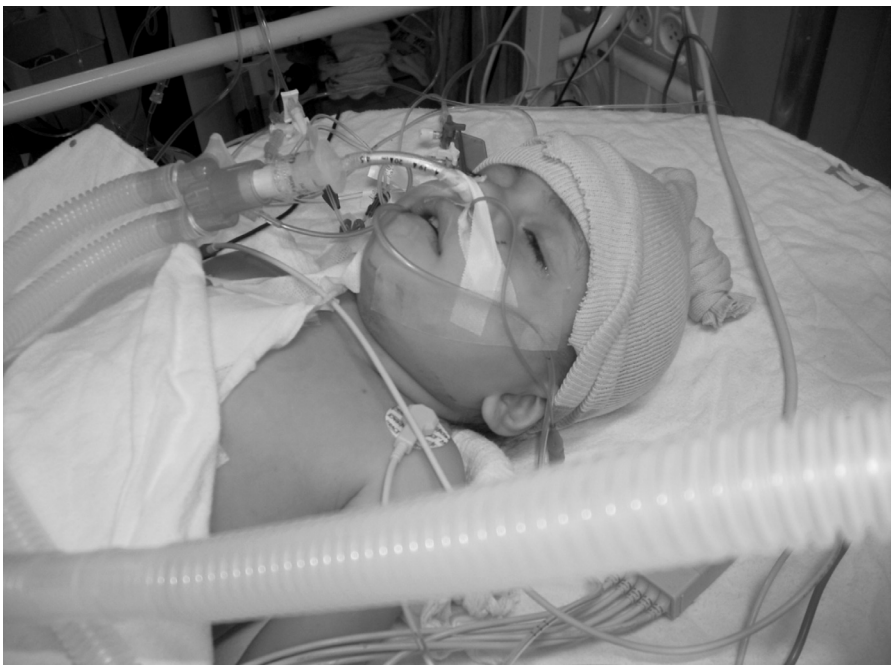
Clinical manifestations are directly related to the degree of consciousness following rescue and resuscitation.

Clinical Features (Whaley and Wong 1995)

Investigations: After drowning history collection, physical examination, Chest X Ray, Arterial Blood Gas, X – ray spine, suction tip for culture and sensitivity, toxicology screening, ECG to document normal functions.

Therapeutic Management: The adjuvant lines of treatment should be started and carried out simultaneously. This consists of keeping the child warm, intra cardiac administration of stimulant like adrenaline or calcium chloride or both, and delivering 100 % oxygen, gastric and tracheal intubation

Category	Characteristics
A	Awake, minimum injury, fully conscious, may have mild hypothermia, mild chest radiography changes, mild arterial blood gas abnormalities.
B	Blunted Sensorium, moderate injury, stuporous, purposeful response to painful stimuli, mild to moderate hypothermia, frequent respiratory distress, abnormal chest radiographs, and arterial blood gas abnormalities.
C	Comatose, Severe anoxia, patient unarousable, abnormal respiratory pattern, seizures, shock, marked arterial blood gas abnormalities, abnormal chest radiographs, dysrhythmias, metabolic acidosis, hyperkalemia, hyperglycemia, disseminated intravascular coagulation.
C1	Decorticate, Cheyne – Strokes Respirations
C2	Decerebrate, central hyperventilation
C3	Flaccid, apneustic or cluster breathing
C4	Flaccid, apneic, no detectable circulation



and suction, defibrillation, administration of sodium bicarbonate to correct the acidosis and electrolyte replacement to correct electrolyte imbalance. Supportive therapy includes postural drainage, steroids and antibiotics are given only for specific indications.

Complications: The common complications that could result from near drowning are:

Aspiration pneumonia that occurs approximately 48 to 72 hours after the episode

Bronchospasm

Alveolar – capillary membrane damage

Atelectasis

Abscess formation and

Hyaline membrane disease that occur after aspiration of fluid

Hypoxia and death.

Prognosis: The Prognosis is good if the drowning occurred in less than 5 minutes. Severe neurological impairment and death occurs for more than 10 minutes of drowning.

Prevention

- Cover the water tubs and water tanks.
- Adequate supervision of infants / small children
- Parents with pools should know cardiopulmonary resuscitation.

Case Report

Nursing Management

Nursing management of Master Sanjay as follows

Nursing Diagnosis

Ineffective airway clearance related to accumulation of fluid during drowning secondary to spasm of larynx.

Interventions

- Positioned the child in fowlers or according to the condition
- Gave chest physio every 2 hourly followed by oral and tracheal suctioning
- Administered Oxygen
- Monitored vital signs of RR [56 / mt], heart rate [124 / mt], BP [103 / 58 mm of Hg], increased CVP
- Administered 2 hourly bricanyl nebulizer, and inj. Dexamethasone 8 hourly

Nursing diagnosis

Impaired breathing pattern related to tracheo bronchal obstruction, hypoxia, hypoxemia, secondary to drowning, emphysematous changes in the accumulation space

Interventions

Positioned the child with head end elevation of 30- 40 degrees

- Cleared the airway by oral and nasal suctioning
- Started the child on Oxygen 10 L / minute, as the respiratory rate was increased to 58 / mt, child was electively intubated with ET tube NO 5 and fixed at 14 cm with the setting of FiO2 100 %, rate 30 / mt, P/P 15/3
- Administered antibiotics as inj. Cefotaxime q6h and inj. gentamycin q12h
- Kept the child on NPO and started on IV fluids
- Documented the care provided

Nursing Diagnosis

Decreased Cardiac output related to impaired contractility, decreased oxygenation, and alteration in heart rate, rhythm, and conduction secondary to drowning.

Interventions

- Assessed HR, BP, breath sounds , JVP, capillary refill, skin color and peripheral pulses

- Connected the child on ECG monitor
- Compared the vital signs at every shift and prn
- Administered medication as ordered like digitalis, diuretics, vasodilators and ianotropic agents
- Maintained the optimal fluid balance
- Placed the child in semi fowlers to reduce preload and ventricular filling
- Administered humidified Oxygen
- Organized nursing care to allow rest periods
- Provided explanations as appropriate to allay anxiety

Nursing Diagnosis

Fluid volume excess related to aspiration of water, fluid shift from the interstitial to intravascular space secondary to prolonged submersion in fluid medium

Interventions

- Checked weight daily
- Calculated and administered IV fluid as accurate per the order
- Monitored strict intake and output chart
- Connected the child on cardiopulmonary monitor
- Administered sodium bicarbonate to correct metabolic acidosis
- Prepared for central line placement
- Provided passive exercises
- Elevated edematous extremities

Nursing Diagnosis

Hyperthermia related to exposure to cold environment, inactivity, secondary to near drowning

Interventions

- Assessed temperature every 2 hourly
- Monitored electrolytes and peripheral perfusions
- Removed extra clothing
- Exposed the child under the fan
- Gave tepid sponging
- Administered antipyretic 10 ml/kg
- Administered antibiotic on time

Nursing Diagnosis

Actual infection related to aspiration of contaminated water secondary to inability to keep self above the water level.

Interventions

Suctioning was done to remove secretions

- Monitored temperature, heart rate and respiratory rate every 2 hourly
- Notified the physician about the temperature, knee pain and X-ray was taken and magnesium sulphate dressing done over the knee
- Administered antibiotics as per order
- Positioned the child every 2 hourly
- Encouraged postural drainage and chest physiotherapy to promote drainage
- Advised parents to but balloons to provide breathing exercises

Nursing Diagnosis

Knowledge deficit related to near drowning, child's critical status, admission to pediatric intensive care unit, and home care.

Interventions

- Assessed the educational status and level of understanding of the parents about child's illness and treatment
- Established a good rapport with the parents
- Encouraged expression of feelings about condition and treatment
- Reassured and supported the family
- Allowed for questions and answered honestly as possible
- Included family in child's care
- Retreated the importance of supervision, emergency management follow ups and home care.
- Advised him to come for review after 10 days

Conclusion

Accidental drowning can be decreased if children are given training in swimming skills at a younger age. Children must swim under supervision. The personal flotation devices (PFDs) should be made available in swimming pools and its use can be encouraged.

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Role of Nurse on H1N1 Viral Infection

Sunanda G.T.*

Today the world is facing one of the dreadful disease which is swine flu. Swine flu is caused by H1N1 Virus. The H1N1 is a new influenza virus causing illness in people. This was first detected in April 2009 in the United States and other countries, including Mexico, Canada etc. Now in India it is spreading very fast day by day and is increasing the affected cases and deaths.

This virus is spreading from person to person, as much the same like regular seasonal influence viruses spread.

To be specific, Swine flu is a respiratory disease caused by a type. A which reflects pigs, until now not infected humans but later it dearly showed it spreads from person to person probably through respiratory route by droplets from coughing and sneezing.

The Swine flu referred for this because Laboratory testing showed many of gems in the H1N1. Viruses were very similar to influence viruses that normally occur in Pigs in North America. But further study has shown two gems from virus that normally circulate in pigs in Europe and Asia those are avian genes quadruple reassortant virus. The outbreak intensified rapidly from that time and work and more countries have been reporting cases of illness from this virus.

Definition

Swine flu is a highly contagions acute respiratory disease of pigs caused by one of several swine Influenza a Viruses.

Swine influenza viruses are common only H1N1 Virus sub type are other subtypes are also seen in pigs are e.g. H1N2 H3N1 H3N2.

Although Swine Influenza viruses are normally species specific and only infect pigs, they do sometimes cross the species barrier to cause disease in humans.

The now out broken swine Flu in human is a new strain of Influenza A virus subtype H1N1 that derives in part from human Influenza, avian Influenza and two separate strains of swine Influenza.

History

1918 - Pandemic in humans

The 1918 flu pandemic in humans was associated with H1N1 and influenza appearing in pigs this may reflects a zoonosis either from swine to humans or from human to swine.

1976 - US outbreak

This new strain appeared to be closely related to the strain involved in 1918 flu pandemic spread simultaneously, also caused illness. Alarmed public health system to action must be taken to control major pandemic.

1988 - zoonosis

Influenza like illness was reportedly widespread along the pigs exhibited at the fair is 76%. 25 swine exhibitors aged 9-19 tested positive but no serious illness were detected among this group.

1998 - US outbreak in swine

It was found in pigs and it had spread through pig populations across the US.

2007 - Philippines outbreak in swine

Agriculture officers investigated the outbreak of swine flu in Philippines mortality rate is less than 10%.

2009 - outbreak in humans

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2009 flu pandemic among humans often is called swine flu because testing showed many germs in virus are similar to influenza viruses normally occurring in North America swine but later research has shown outbreak is due to a new strain of H1N1 not previously reported in pigs.

Although initial reports identified the new strain as swine influenza, its origin is unknown. Several countries took precautionary measures to reduce the chances for a global pandemic of the disease.

Mode of transmission

In humans

The new swine flu viruses is highly contagious and spreads from person to person :

a) Droplets from nose, mouth by coughs or sneezes. Droplets can spread about one meter (3 feet)

b) Close nearby breath of infected person.

c) Cough or sneezes into their hands, droplets carry virus easily transferred to surfaces that the person touches like door handles and hand rails., telephones & keyboards etc. If touch of these surfaces touches your face virus enters your system & become infected.

d) Zoonotic infection was influenza virus transmitted through poultry & swine esp. people with intense exposures.

In Pigs

It is quite common in pigs, the main route of transmission is through direct contact b/w infected & uninfected animals.

And, also seen in other species like wild animals & birds.

Period of Compensability

It is most contagious during the first 5 days, can remain so up to 10 days esp. youngster children might potentially be contagious for longer period.

Who is at risk

For sake of prevention, all people who come across infected persons are at risk. But those who are more vulnerable & becoming seriously ill with swine flu are people with :

- Chronic lung diseases including persons having asthma
- Chronic heart diseases
- Chronic kidney diseases
- Chronic liver diseases
- Chronic neurological diseases
- Suppressed immune system (caused by diseases or treatment)
- Diabetes
- Pregnant women
- People aged 65 or older
- Young children under 5

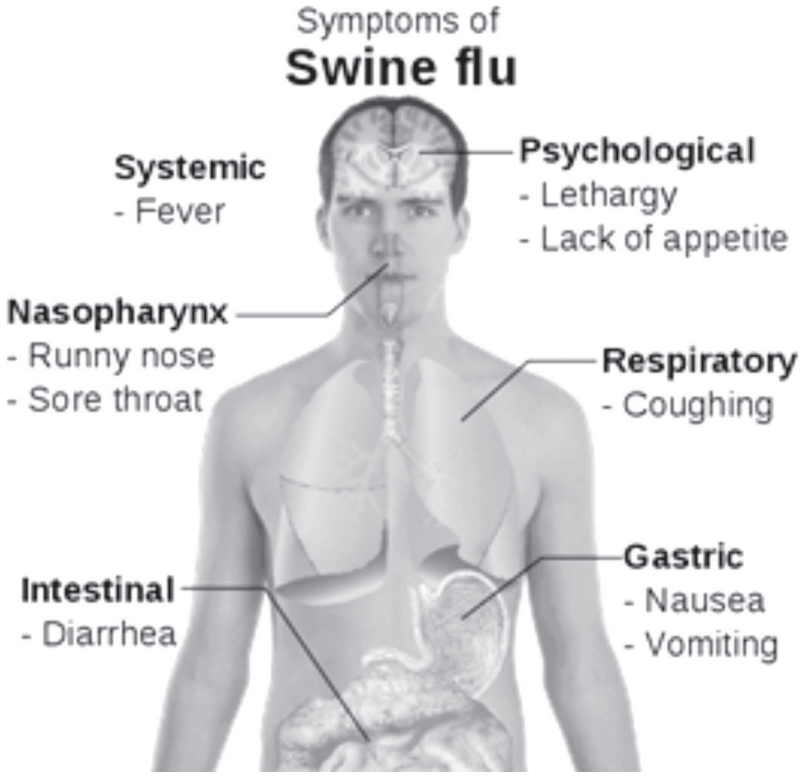
Signs and Symptoms

According to the Center for Disease Control & Prevention (CDC) in humans the symptoms of 2009 swine flu H1N1 viruses are similar to those of influenza like illness in general.

Symptoms include fever, cough, sore throat, muscle pain, body ache, headache, chills & fatigue. Patients showed signs of Diarrhea & vomiting also.

Diagnosis

1. Differential diagnosis of probable swine flu requires not only symptoms but also a person's recent history with acute febrile respiratory illness who have been contact with persons with confirmed swine flu. The sign & symptoms are very



sever and fatal.

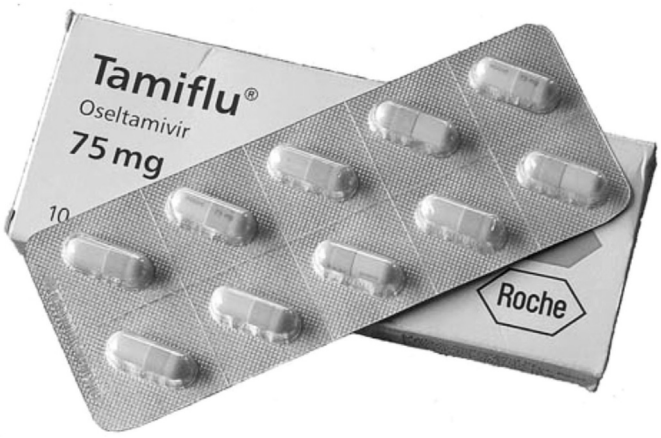
2. Laboratory testing of a respiratory sample of nose and throat swab for confirming swine flu.(The sample should be collected within first 4 to 5 days of illness).

Complications & causes for death

1. Respiratory failure
2. Pneumonia
3. High fever leading to neurological problems.
4. Dehydration & electrolyte imbalances.
5. Fatalities are more common in young children and elderly.

Treatment

- Anti viral drugs can make the illness milder and make the patient feel better faster.
- Anti viral drugs work best if started soon after getting sick (within 2 days of symptoms)
- Besides anti viral , supportive care



at home or hospital, focus on controlling fever relieving pain and maintain fluid balance as well as early identifying and treating any secondary infections, complications or other medical problems.

- The anti viral medicines Tamiflu (Oseltamivir) and Relenza (Zanamivir) are being used to treat people with swine flu.
- Side effects of antiviral drugs may include nervousness, poor concentration, nausea & vomiting. Relenza drug is not recommended to people with breathing problems, such as asthma because it may cause worsening of breathing problems. Discussion of side-effects & prescriptions must be by a health care professional.
- Antibiotics will not help to control symptoms.
- Vaccines are being made in large quantity, clinical tests have begun in August 2009. The more doses of Swine flu vaccines could be ready as soon as September 2009. The first dose of vaccine will be given to pregnant women & children aging 6 months – 4 years and to older school kids to follow.

Immediate action when person feels sick

1. The person living in areas where people have been identified with new H1N1 flu & become ill with influenza like symptoms including fever, body aches, runny nose or stuffiness, sore throat, nausea or vomiting & diarrhea, should stay home & avoid contact with other people, except to seek medical care preferably and recommended to visit nearby government hospitals.
2. If person experiences severe illness or high risk for complications, contact health care provider & seek medical care. The health provider will determine testing & treatment needed.

Warning signs that need urgent medical attention

1. In children

- Fast or troubled breathing
- Bluish or grey skin colour
- Not drinking enough fluids
- Severe or persistent vomiting
- Not waking up or not interacting
- More irritable
- Severe symptoms like high fever & worse cough

2. In adults

- Difficulty breathing or shortness of breath
- Pain or pressure in chest or abdomen
- Sudden dizziness
- Confusion
- Severe or persistent vomiting
- Severe symptoms like high fever & worse cough

Prevention & precautions

1. Using standard infection control against influenza. Includes frequent washing hands with soap & water or alcohol based sanitizers.
2. Disinfecting household surfaces.
3. Anyone with flu like symptoms should stay away from work or public transportation & should contact a doctor for advice.
4. Avoiding large gatherings, where cases are identified. Avoid unnecessary traveling. If need to travel

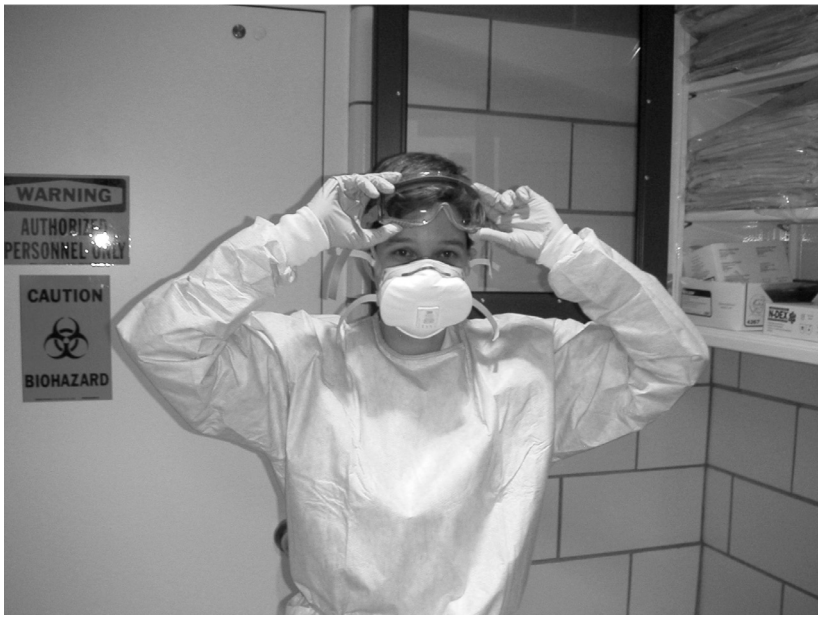
must take care & undergo screening for particular countries or places where cases are found.

5. Follow public health advice regarding school closures, avoiding crowds & social distancing measures
6. Follow these general procedures to reduce the risk of spreading of disease:
   - Cover your nose & mouth with a tissue when coughing or sneezing.
   - Wash hands regularly with soap & water esp. after coughing or sneezing.
   - Clean household surfaces frequently with normal cleaning products.
   - Avoid close contact with sick people.
   - Stay home for at least 24 hours after fever is subsided, except to seek medical care or for other necessities.
   - Do not go to work or school while ill.
   - Wear a face mask, when sharing common spaces, moving in crowds etc.
7. Vaccines against the new strain of virus are being developed & could be ready as early as possible.
8. Precautions at home :
   - Regular hand washing with soap & water
   - Avoid touching your eyes, nose & mouth
   - Eat healthy, esp. proteins, vitamins, mineral rich food to help the body to maintain good health, build strength, and keep the immune system strong.
   - Regular exercises help as immune enhancing effect.
9. Precautions at schools :
   - Avoid close contact with people who are sick
   - Persons with flu like symptoms should stay at home & seek medical care.
   - Hand washing practices.
   - Avoiding touching of eyes, nose or mouth.
   - Check regularly children for flu like symptoms & report to parents, keep children at home & get treated until symptoms subside.
   - Educate the teachers & children about the disease.
10. Precautions while traveling :
    - Avoid unnecessary travel.
    - If required to travel, must screen before & after visiting of particular places where might cases are identified.
    - Follow the screening & policies set up for controlling spread of virus by many countries or places.

Nursing responsibilities

Nurses are on the frontlines of our health care system & will play a critical role in treating & preventing the spread of swine flu.

- Educating themselves & their communities about disease & disease prevention in their work places.
- Every nurse must have the capability to develop comprehensive plans & interventions to tackle the disease outbreak.
- Nurses should update their knowledge by getting or knowing latest information about disease & disease



prevention.

- Nurses should demand the hospital authorities to update their knowledge by facilitating different media like information brochures, mass media, video clips, internet surfing etc.
- Nursing Superintendent should motivate & facilitate their staff to get pertinent information, clinical guidance & recommendations to handle disease.
- Follow strict standard infection control measures while attending the confirmed & suspected cases of swine flu.
- Isolating the suspected & confirmed cases.
- Nurses should prepare themselves not only for the patient with illness, but also for questions & concerns from the public & request or call to help health departments to identify potential new cases.
- Nurses should keep practicing & taking the same precautions as they would with an outbreak of any other kind of influenza.
- Instruct the clients who are coughing, or sneezing to wear a mask, wiping down surfaces & chairs, frequent hand washing.
- Nurses should collect detailed history such as traveled outside country or places where the cases have been identified & if they have come in contact with anyone who might have swine flu.
- Attend the suspected or confirmed client in isolated room, ask the client to wear mask & wash hands frequently.
- Nurses should protect themselves by Personal Protective Equipments (PPE) like mask, gloves, gown & eye protection goggles while attending clients.
- Collect the samples for testing if patient needs to confirm the test with precautions.
- Nurses who are not using appropriate PPE while in close contact with the suspected or confirmed case of swine flu, should take anti-viral medications as prophylactics.
- Health care providers at high risk to get infection to consider taking anti viral medications as prophylactics.
- Nurses may be in the role of educators and myth-busters. They need to know the facts, be calm & act appropriately.
- Nurses need to check not only national resources but international resources such as CDC, WHO etc. for information.
- Nurses should also be aware of the plans of their own institutions to have dealing with public health emergencies like facility for isolation wards, laboratory for testing, drug supplies etc.
- Nurses should understand the microbiology of virus, what symptoms are severe & what not to severe to the patients.

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'I Hate Falling'

Umadevi A.K.*

Falls are the leading cause of accidental deaths among people over the age of 75 and the second leading cause for those aged 45 to 75 yrs, according to the national safety council. Although the consequences of falling are well known, the relationship between aging and falling is still a mystery.

Common causes of falls in the elderly

- Accident
- Balance disorders
- Confusion
- Cognitive impairment
- Environmental hazard
- Fall from bed
- Gait disturbance
- Medications / Alcohol
- Pain related to arthritis
- Postural hypotension
- Visual disorders

Key physical findings in the elderly patient who falls or nearly falls

I - Inflammation of joints / joints deformity.

H - Hypotension (orthostatic BP changes)

A - Auditory and visual abnormalities

T - Tremor

E - Equilibrium problem

F - Foot problems

A - Arrhythmia, heart block / valvular disease.

L - Leg-length discrepancy

L - Lack of conditioning

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I - Illness

N - Nutrition (poor, weight loss)

G - Gait disturbance.

Reducing the risk of falls in the elderly

- Eliminate environment hazards
- Improve home support
- Provide opportunities for socialization and encouragement
- Modify medication
- Provide balance training
- Modify restraints
- Involve the family
- Provide follow-up

What can I do to prevent falls?

First be sure your home is as safe as possible. Here are some tips:

- Wear shoes with nonskid soles.
- Be sure home is well lit so that you can see things you might trip over.
- Remove throw rugs or fasten them to the floor with carpet tape. Tack down carpet edges.
- Don't put electrical cords across pathways.
- Don't climb on stools and step ladders. Get someone else to help with jobs that call for climbing.
- Don't wax your floors at all or use nonskid wax.

Get regular check-ups

- Have your eyes checked every year for vision changes, cataracts, glaucoma.
- Have your hearing checked every 2 yrs.
- See your doctor if you have foot pain or corns.
- See your doctor right away if you feel dizzy, weak or unsteady on your feet.
- When you get up from your bed during the night or in the morning, sit on the side of the bed for a minute before you stand up.

What can family do to help prevent falls?

Your family can help you check your home for dangers that might make you fall. They can help make your home safer for you.

Tips from Thurmon Lockhart for preventing falls

Around the house:

- Wet surfaces may not appear dangerous until you step on them and then it's too late. Heed these tips to stay safe.
- Minimize changes in walking surfaces and use slip resistant coverings.
- Create color contrasts between walls and floors; lights- colored floor surfaces are preferable.
- Increase lighting and reduce the contrasts in lighted areas.
- Install wall mounted light fixtures, accessible while standing on the floor.
- Install more outlets to minimize the use of extension cords.
- Relocate switches so that nobody has to walk through darkened areas.

Kitchen and bathroom

- Securely install grab-bars.
- Install slip resistant tile.
- Clean up grease, water and other liquids immediately.
- Avoid climbing and reaching to high cabinets or shelves.
- Always keep a night-light on in your bathroom.
- Use bathroom rugs with nonskid backing.
- Vary the colors in your bathroom. Add bright decals at the edges.

Interventions to reduce the risk of falls in the elderly

Risk Factor	Interventions
• Postural hypotension ankle pumps	• Behavior recommendation hand drenching and elevation of the head of the bed
• Use of sedative – hypnotic drug	• Reduction about appropriate use of sedative- hypnotic drugs
• Environmental hazards	• Home safety assessment with appropriate changes
• Impairment in gait	• Gait training
• Impairment in leg/ arm	• Exercise with resistive hands and putting resistance training

TNAI Karnataka Branch Holds Biennial Conference

The Trained Nurses Association of India(TNAI), Karnataka Branch conducted its 34th Biennial Conference and centenary celebrations on July 25 and 26, 2009 at Bangalore. The theme of the conference was 'Future of Nursing: Implications for Nursing Education, Practice & Research'.

The event was inaugurated by Mr. T. Dileep Kumar, Nursing Advisor to Government of India and President of Indian Nursing Council.

In the inaugural speech, he briefed the audience about the existing nursing services in India and its comparison with global average and stated that 3.13 lakh nurses are likely to be trained by 2012 with existing capacity as against the requirement of 10.43 lakh nurses. He also stressed the need to establish 24 centers of excellence in the states @ Rs.20.00 crore per Center.

Mr. Dileep Kumar was honoured as "Karnataka Shushruta Ratna" for his contribution in uplifting the standards of nursing profession.

Mr. Ramachandra Gowda, the Minister of

Medical Education, Karnataka in his speech said that the nurses are not properly recognized, and their salaries are very low compared to their responsibilities.

Mr. A.B. Kulkarni, President, TNAI emphasized the need for solidarity, unity and keeping abreast with the knowledge and technological explosion.

Dr. B. S. Shakuntala, the President of state Branch in her presidential speech highlighted the problems faced by nurses in rendering quality care inspite of improper working environment, exploitation, low wages, lack of facilities for professional development, long working hours and social inequality. ■

Stairways

- Install hand rails on both sides of the stairs and extend them one foot beyond the last step at both top and bottom.
- Use a different color contrast to mark the 1st and last step.
- Install a second handrail if the stairs are wide enough.
- Install light switches at top and bottom of stairs.
- Be sure carpeting is tightly woven and installed. So it doesn't move / slide.

Summary

Most falls do not end in death or result in significant physical injury. However, the psychologic impact of a fall or near fall often results in a fear of falling and increasing self restriction of activities.

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STRESS MANAGEMENT

N. Mathar Mohideen*

Are you in stress? Don't worry! You have a way to reduce it!

All individuals suffer with stress at any point of their life time: death of the family member, divorce, educational, occupational and illness etc. The type of stress varies from person to person at different stages of life and it varies from time to time. Stress is the immediate effect to the threat or danger. Sometime it may be the warning also. Day to day activities and ongoing tension can also cause stress. The following situations are common in our daily life, such as traffic or travel, getting delay for the meeting or job, heavy workload and modern lifestyle. This may slowly damage the physical and psychological health.

"Silent killer" is the best term applicable to stress. Day to day stress can result with changes in the physiology. It can lead to the state of unhealthy.

The following health impacts are very common due to stress:

Accidents - Digestive disorders

High blood pressure - Headache

Heart diseases - Lack of power

Lack of concentration - Loss of appetite

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Obesity - Sleep disorders

Stress makes the person lose interest with the committed work and responsibilities. Due to this the person cannot finish up the work on time. It makes the condition worse and incomplete. It leads to hurry in the activity and unsatisfied task performance. Man cannot judge the right and wrong of things with stress. Sometime it may even end up with the threat to the life. Depression is also one of the main psychological effects of stress. Stress effects psychology of a being directly.

Diet and stress

Due to stress, the required body energy is diverted. Enzymes and oxygen from the digestive tract is diverted. Busy life style of today is tempting to forget about the balanced diet by skipping the meal or eating anything which is readily available. The needed energy and nutrients are missed. It leads to impact on health. It makes imbalance between the required calories and consumed calories. Sometime people eat lot of snacks to compensate the meal. This causes to increase the sugar level high and after some time it suddenly drops. Some of the studies also suggest mat intake of Vitamin C helps in lowering the stress hormones.

Physiological effects of stress

Fight or flight responses are initiated by the stress or threat event. (Cannon and selye,1930). When the external environment is disturbed, the internal balance also changes. Sympathetic nervous system and endocrine system are the two channels balancing the fight or flight response. Both depend on each other in maintaining the equilibrium. Both hormones and neurons communicate with cells and create the delicate dynamic balance between the body and its surrounding, through paired systems and feedback mechanisms (Jacobs, 1973; Morgan, 1991). Adrenaline is called as stress hormone. It has the same effect as sympathetic nervous system. It is also the neuro transmitter in the central nervous system. Hans Selye characterized the stress reaction into three stages: alarm stage, resistance stage, and exhaustion stage,

- The first stage is initiated with a threat This is short term reaction. All the bodily activity is increased in response to a stressor. This starts the body's "fight-flight" reaction, causing the release of adrenalin.
- If the threat persists with the person, he enters the second stage. In the resistance stage he makes much effort to cope up with his level of stress. If there is no escape from this, the body will begin to release stored sugars and fats, using up its bodily resources.
- Third stage is the exhaustion stage; it leads to illness and injury. Burn out is the effect of this stage. If the stressful situation is not resolved, he may become chronically stressed. The body's needs for energy resources exceeds its ability to produce them.

Stress among new students

Most of the studies have shown that the stress level of the new students are high while they join a new course, especially in medical related profession. Studies have shown the following impact on the health among the new students: increased use of alcohol, depression and life dissatisfaction, with corresponding decreases in sleep, socialization, and other positive health habits and stress coping mechanisms.

Stress Management interventions

- Based on Lazarus & Folkman, (1984), coping is defined as thoughts and behaviour that people use to manage the internal and external demands of situations that are appraised as stressful.
- The research activities on coping level can give great contribution stress. It helps in identifying the factors contributing to better level of coping. Factors such as personality, type of stress, duration, expected or unexpected threat, culture, social groups, family, education, environment and occupation contribute to the individual response to the threat.

The following interventions can be designed to reduce the stress and deal more effectively with the situation:

- Exercise such as walking, swimming, dancing with focus on with an aim.
- Deep breathing exercise with the mental focus on postures.
- Yoga with focus on breathing.
- Progressive muscle relaxation technique with contraction and relaxation of the muscles.
- Involving in religious activities,
- Engaging with social programs and gathering.

Report from Shapiro shows the following effective techniques to reduce the stress, such as support group, relaxation training (meditation and hypnosis), time-management and coping skills, mind fullness-based stress reduction, or mentoring.

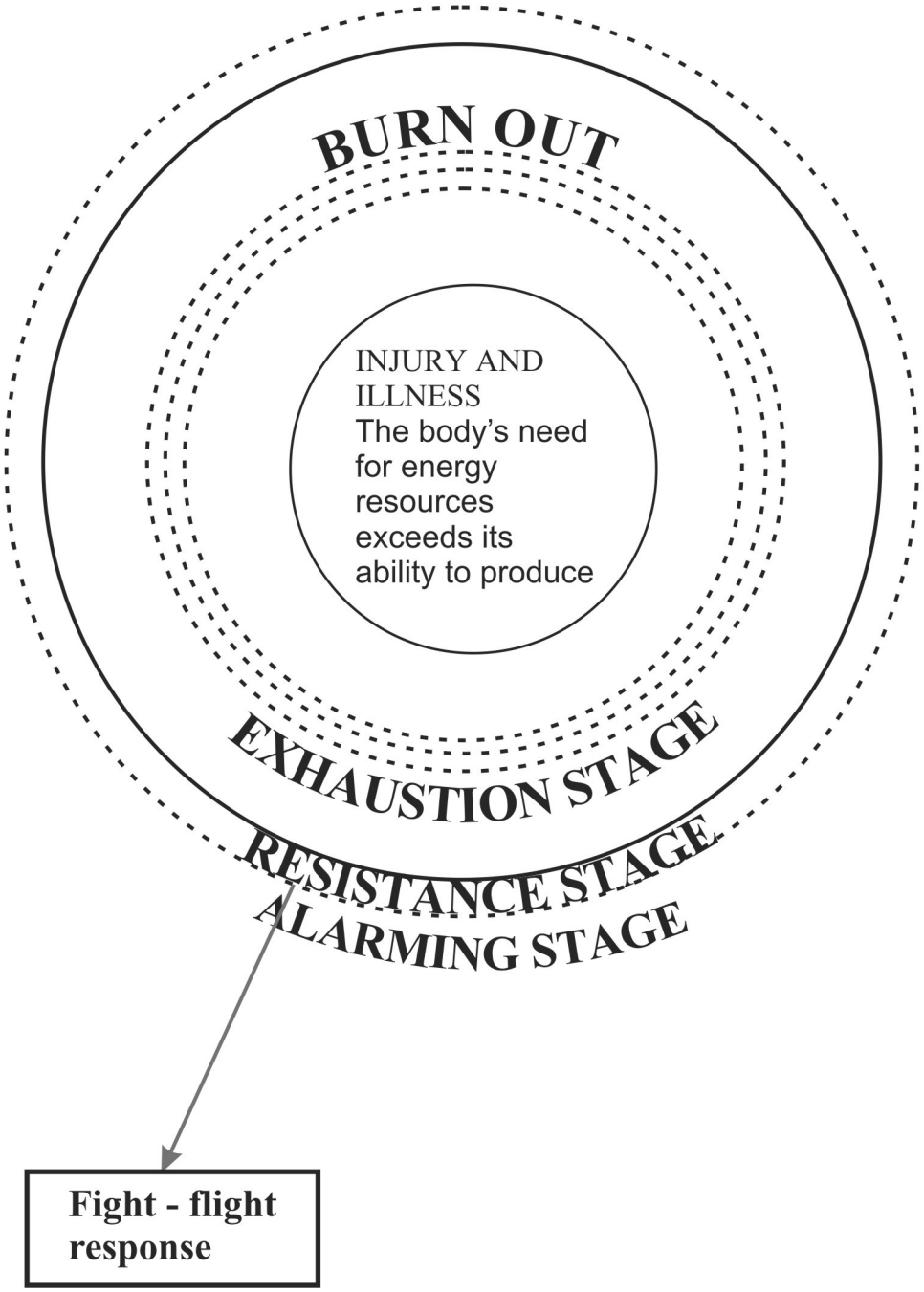
Application of systems model

Systems model have better identified

by Betty Newman theory, it gives the way for the nursing education, practice, Administration and nursing research. This model is well applicable to all the areas of nursing practice. It creates the pathway to the holistic approach. This systems model is well applicable to the stress and management. It helps to provide all the three levels of prevention to stress and gives pathway to the healthy life.

- Health - stability of the system is based on the status of the health. The harmony of the whole system depends on the parts and subparts. Wholeness is based on interrelationships of variables that determine the resistance of an individual to any stressor. On the whole system psychological system is very important in identifying the stress. If it is disturbed with stress, it makes the changes within the other system or the sub parts.

STAGES OF STRESS

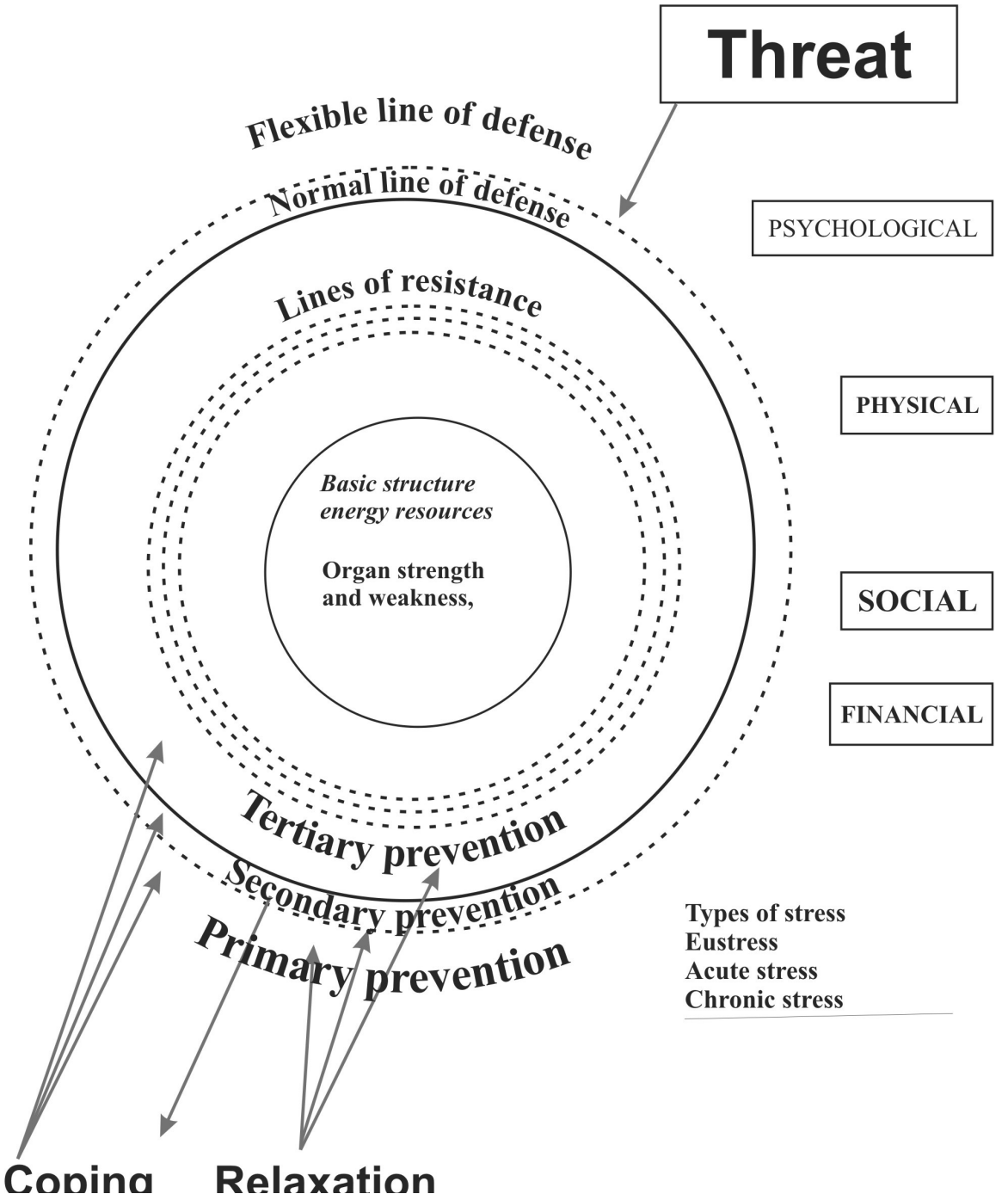


Stress illness

Wellness coping & relaxation

- Stability of the system determines the status of health. Health is dynamic (i.e., constantly subject to change). Lack of stability between the parts and subparts of the system leads to illness. Health is viewed as a point along a continuum from wellness to illness; optimal wellness or stability indicates that all a person's needs are being met. A reduced state of wellness is the result of unmet systemic needs. The individual is in a dynamic state of wellness-illness in varying degrees at any given time.
- Nursing should be focused on identifying the stressors A unique profession focusing on the total person (client system) and his or her, or group, reactions to stress

EFFECTS OF STRESS



Nursing Interventions	Rationale
Therapeutic relationship should be established with client. The following are the key principles of therapeutic relationship. DEAR D - Decision making E - Empathy and encouragement A - Answering the questions immediately and honestly. R - Respect the client Values	To encourage the client. To promote the cooperation.
Explain about the stress, illness, treatment and prognosis. Give positive support to the client.	To improve the client adjustment to the disease.
Encourage the client to ask questions.	To improve the adjustment through verbalization.
Assess the coping ability and mechanism used by the client. Advice the client by formulation of new coping strategies,.	To determine the level of coping ability. To assesses him to formulate the new coping approaches.
Assist the client in finding alternative life style modification, participation, spiritual needs and learning new activities and behaviours.	To provides a sense of control in Lifestyle.
Encourage the client on self care activities. Identify the strength and weakness and give appropriate rewarding on the client strength.	To increase self-esteem and adjustment.

and on factors influencing reconstitution. The person is seen as a whole, and it is the task of nursing to address to whole person. Holistic approach should be used to find the solution for the stress.

Nursing assessment

- Identify the person verbalization on coping & inability to cope.
- Assess the problem solving ability.
- Find out if the client denies problems or weaknesses in spite of evidence to contrary.
- Recognize the non-acceptance of health status changes.
- Rule out the family physical and emotional support for the client.
- Evaluate the neglect of the client on health.
- Assess the community participation.
- Identify the possible stressors from the community.
- Categorize the level communication with different situations.

Subjective data

In subjective data the client tells about his stress.

Objective data

Careful observation made on the fallowing:

- Stress
- Uncomfortable
- Irritable
- Sleepless with sunken eyes
- Anxiety

A - Z of stress interventions

- ➤ Attitude (Positive attitude)
- ➤ Breathing exercises
- ➤ Caffeine intake should be limited.
- ➤ Do the things with high level of coping
- ➤ Encourage the intake of Vitamin C (Research has shown – effectiveness on stress reduction)
- ➤ Frequent breaks during the activities
- ➤ Get in to regular dietary habits
- ➤ Healthy life style
- ➤ Increase the intake of Anti Oxidants (every helpful in oxidative stress)
- ➤ Join with the group work
- ➤ Keep time schedule and manage-

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ment

- Learn the new things and outcomes
- Maintain balanced activity and rest
- No Alcohol
- Organization of the work plan
- Physical exercise
- Quit smoking
- Rest adequately
- Speak positively and respectfully.
- Take adequate Vitamin and supplements (deplete the nutrients more quickly)
- Utilization of support group
- Vinyasa Yoga (Flow yoga/breath movement yoga)
- Water intake should be encouraged (Hydration)
- Yes to democracy and Yoga
- Zero exposure to the chemical and radiation

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Barriers to Research Utilization and Evidence Based Practice

C. Nalini Jeayavantha Santha*

The generation of empirical knowledge is essential to improve clinical practice. It has been the major focus of researchers since 1980. The generation and diffusion of empirical knowledge are expanding. With the current changes in the health care system society is demanding more of nurses than ever before.

Nurses now have the attention of health care policy makers and can influence the future delivery system. Meeting policy makers' expectations require conduct of high quality research and the use of those findings in practice.

The use of research findings in nursing practice is called research utilization. Now there is a realization that high priority to be placed on the utilization of research findings in nurse practice. Evidence based practice is defined as the use of best clinical evidence in making patient care decisions.

The ultimate goal of nursing is to provide evidence based care that promotes quality outcomes for patients, families, health care providers and the health care system. Evidence based practice involves the use of research findings in promoting the understanding of patients and families experience with health and illness and implementing effective nursing interventions to promote patient health care and providing quality.

Problems related to knowledge utilization

Knowledge utilization is the process of disseminating and using research generated information to make an impact on or change in the existing practice in society. The time lag between generating and using knowledge by society has been a concern for numerous years. The gap between the discovery of research knowl-edge and use of that knowledge in practice can be extensive.

The average length of time between discovery and utilization may be almost 10-15 years (e g.) benefits of aspirin in protecting patients from myocardial infarction and stroke have been known since the mid -1980's. The U. S Food and Drug Administration approved the use of aspirin as a preventive measure in persons at risk for cardiovascular disease only recently.

Barriers to using research in nursing practice

Knowledge of barriers to utilizing research and evidence based practice in nursing is essential. This knowledge will be useful in planning and implementation of efforts to integrate research into practice.

Barrier related to nurses and nursing profession

- Research findings that clearly warrant utilization are not being used in nursing practice immediately. Some studies were conducted to analyze this. Brett (1987) studied the extent to which nursing findings that met the conduct and utilization of Research in Nursing (CURN) Project's (1982) criteria for use in practice were being used by practicing nurses (eg) internal rotation of the femur during injection into the dorsogluteal site in either the prone or side lying position results in reduced discomfort from the injection. Internal rotation of the femur is achieved by having patients point their toes inward.

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- Forty four percent of the nurses were aware of the findings. 34% were persuaded that the finding was useful for practice. 29% were implementing the finding in practice sometimes, but only 10% were implementing it always. The finding regarding positioning during an intramuscular injection would be comparatively simple to implement. The decision could be made up by the nurse alone. No physicians order is needed. Administrative personal would not have to give approval. No additional cost or nursing time would be involved. These findings had been available in the literature for more than 10 years. But still 56% to 66% of the nurses were unaware of the findings.
- A common barrier to research utilization is the communication gap between researcher and the institutional based practitioner.
- Shortage of appropriate role models – nurses who are recognized for their success in using or promoting the use of research in clinical practice.
- Nurses may not perceive themselves as independent professionals capable of recommending changes based on research results. So they don't initiate innovations based on research findings.
- All the nurses do not have access to relevant literature and research reports.
- Studies have reported that many clinical nurses have characteristics that constrain the use of research evidence in practice. Many nurses have not received any formal instruction in research; they may lack the skills to judge the research report. The ability to critique a research report is not necessarily sufficient for effectively incorporating research results into daily decision making. They may have lacked of research skills, critical appraisal skills and understanding of the language. Nurses' attitudes toward research and their motivation to engage in evidence based practice have repeatedly been identified as important barriers. Barrier scale was administered to 2600 Nurses in Northern Ireland. The research findings show that the top barrier was the practicing nurse does not feel she has enough authority to change patient's procedures. People are often resistant to change. Change requires effort, retraining and restructuring of work habits. Change is perceived as threatening (e g) changes may be perceived as affecting job security.

Barriers related to research

- For many nursing problems the state of the art of research knowledge is fairly primitive. For many nursing problems a solid base of valid and trustworthy study results has not been developed.
- Most studies have flaws. So nurses would have a very long wait if they were to wait for perfect studies before basing clinical decisions on research findings.
- Because of the limitations of research methods replication is essential. In different settings this must yield the same result. Then there can be greater confidence in the findings.
- Another limitation for using research evidence is the dearth of published replications.
- Research is often reported in a way that makes findings inaccessible to practitioners.

Barriers related to organisation

- One of the important barriers was perceived to be organizations where nurses work do not support the use of research findings in practice.
- Organizations resist change.
- One of the greatest reported barriers was "insufficient time on the job to implement new ideas.
- Organizations may be reluctant to expend re-sources for research utilization / evidence based practice activities or for changing organizational policy.
- Organizations may not provide resources for the use of outside consultant staff release time, literary materials and internet access and so on.
- No funds to support research based changes for practice.
- No reward for using research findings in practice.
- There are problems with dissemination.
- Inadequate systems for personal and professional development.

Promoting utilization of research and evidence based practice

Some strategies are identified for promoting utilizations of research to facilitate the implementation of evidence based practice in nursing.

Research Studies

- High quality research studies which are valid and reliable to be conducted.
- Curriculum should include formal instruction in research and research findings should be integrated throughout the curriculum.

- Demonstrate positive attitude towards research and its uses in nursing.
- Use of research results cannot be justified based on a single study. So researchers must make a real commitment to replicating studies and publishing the results.
- Efforts must be made to bridge the gap between researchers and practitioners by enhancing the communication of research, synthesis of findings and generation of protocols for use in practice.
- Researchers can address pressing clinical questions.
- Write research reports that are user friendly, with a minimum of research jargon.
- Include implications section with suggestions for clinical practice.
- The results will be used by the practicing nurses only if the study results are disseminated. So disseminate aggressively. Report the results in specialty Journals, conferences, workshop attended by nurse clinicians.
- Development and implementation of evidence based clinical practice guidelines. It should be pilot tested before use.
- There is an urgent need for high quality integrative reviews of research. Integrative reviews are a core feature of the evidence based practice process.

Nurses and nursing profession

The advanced practice nurse is in a pivotal position to decrease the barriers to research utilization.

- A study was undertaken on 356 practicing registered nurses .The scale used was barriers and facilitators to research utilization. Result showed that the nurses needed more time and training to implement changes.
- Nurses should be trained to develop ability to critique a research report.
- Read journals relating to specialty, including research reports in them.
- Provide opportunities for Nurses to meet researchers and explore practice implications.
- Join journal clubs in order to review research related articles that have relevance to practice.
- Take decision to utilize the research findings in practice to be made based on sound rationale.
- Nurses can involve in RU/EBP projects. This will help the nurses to develop positive attitude towards promoting utilization of research in nursing practice.
- Empower the nurses.

Organisation

Organizations will have to adopt multiple strategies to facilitate and promote the use of research in practice.

- Research utilization and evidence based nursing should be a high management priority.
- Help practicing nurses to consider innovative solutions for their problems.
- The administrators must have positive attitude towards research and its use in nursing.
- Motivating the staff to use the research findings by giving them time and financial support for research utilization projects is essential.
- Establish research utilization or evidence based practice committees by helping to develop journal clubs.

Conclusion

Many research utilization projects have been described in the literature beginning in the 1970s. Two widely known projects that have fostered research utilization are the

- Western Council on Higher Education for Nursing (WCHEN). Regional Program for Nursing Research Development Project and
- The Conduct and Utilization of Research in Nursing (CURN).

The two major goals of this project were to stimulate the conduct of research in clinical settings and to increase the use of research findings in the daily practice of nurses. Rogers Innovation Diffusion Model and the Sletler Model for Research Utilization are two models that have been very influential in promoting research utilization in nursing.

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Continued on Page 56

The right to sight: Preventing Eye Injuries in Children

Vani. Nelluri*

"Prevention is the best way to protect your children's sight"

With the birth of every child, man may calculate that God is still hopeful about the world He created (Wordsworth). But healthy survival of the children is threatened in every moment. Child health problems are shocking and alarming throughout the world, especially in the developing countries.

God has given us the grace of vision. The blessing that allows us to see our surroundings and feel the exquisite beauty of what God has created and about 90% of our learning is done through the visual sensation. "NATURE IS BRIGHT AND BEAUTIFUL, LET THE EYES SAY IT". The eye is one of the most delicate organs in the human body. We are responsible to protect this great grace by extending efforts to have it protected.

"The right to sight" -W.H.O

According to WHO, every minute one child goes blind in the world and nearly half the world's blind children are in South East Asian Region (SEAR).

Types of Eye Injuries

1. Foreign Bodies.
2. Injuries by Chemical Solutions and powders.
3. Penetrating Injuries.
4. Superficial (External) Injuries.

First-Aid Management

Foreign Bodies

The eye might be exposed to penetration of foreign bodies whether in the house or work place as example small parts of metals, sawdust, sand, small stones.

Immediate Action

1. Approach the doctor as soon as possible to get the necessary treatment.
2. Do not rub as it may push the foreign body to penetrate the surface of the eye and go inside the eye more and more which might temporary decrease the pain but will make the extraction of the foreign body more difficult and increase the possibilities of getting the eye infected.

To protect the eye from foreign body injuries: Protective eye glasses should be worn when dealing with floating materials and, necessary precautions should be taken (as when working with sand or sawdust).

Injuries by Chemical Solutions and powders

In day to day life we use many kinds of chemical solutions as detergent and antiseptic and others. Some of these solutions are insecticides, paints, detergent, and other toxins like kerosene.

Immediate Action

- Wash the eye immediately and continuously for 20 minutes, (washing the eye while eye lids are wide open by the use of clear liquid. If water is not available use any liquid even cold milk). The delay of

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diluting the solution within the first ten minutes from the injuries could result in serious effects.

- Get checked by a doctor as soon as possible to get the proper treatment.

To protect the eye from chemical solution injury

1. Be cautious and wear protective glasses when working with chemicals.
2. Solutions should be kept out of reach of children to avoid accidents.

Penetrating Injuries

Causes of penetrating injuries of the eye by wires, thorns from trees, Sharp toys and pointed sharp objects that are usually used in the kitchen or the garden.

Immediate Action

1. Cover the eye with very clean gauze after closing the eye lids then protective eye glasses should be worn.
2. The doctor should be approached to get the necessary treatment as soon as possible.

To prevent the eye from penetrating eye injuries: Sharp tools should be used with caution and in the proper way and keep these materials away from the reach of the children.

Superficial (External) Injuries: Superficial (External) Injuries are caused by the exposure to welding rays, Fingers Other non-sharp objects.

What should be done in case of external injury?

- Cover the eye with very clean gauze. Make sure that the lid cannot move underneath the cover. The cover is to minimize the pain accompanied by the movement of the lid on the surface of the scratched cornea.
- The movement on the scraped cornea will reduce the cell growth and prolong the recovery time.
- Consult the eye doctor.

To protect the eye from external injuries:

Safety spectacles should be worn when using the welding equipment.

Do not stare directly into welding rays or the sun.

Be cautious when doing daily activities to prevent harm to eyes.

Prevention of Eye Injuries in Children:

Here are some guidelines, which may help prevent your child from eye injuries:

- Don't let your children play with sealed bottles.
- When you open bottle, keep the nozzle away from your face and eyes.
- Remember that plastic bottles or cans are much safer for your children than glass bottles.
- Put bottles in the fridge, not in the freezer.
- Choose safe toys for your children, which suit their age. Avoid buying darting toys such as bow and arrow, which may hit or injure the eye from a distance.
- Watch your children while at play, and teach them safe activities. Stone throwing during the play may cause severe injuries, which could be avoided.
- Keep detergents, disinfectants and chemicals in a safe place and out of children's reach.
- Teach your children the right way to carry things which may cause harm to them, and also to avoid running while carrying sharp objects.
- Don't allow your children to play with fireworks, which are dangerous.
- Keep children away from kitchenware, which could harm them.
- Teach your children how to protect their eyes by wearing sunglasses whenever they are out. You should also prevent them from looking directly at the sun.
- Don't allow your children to use laser pens.

Conclusion

Eyes are simply amazing. It's because they can give you the perception of images in 'realty'. Clear and healthy eyes are wonderful creation of nature. Therefore proper care should be taken to safeguard the gift "precious of GOD". We should always remember that protection is better than cure; any neglect could lead to harmful results and loss of one of the great graces and we could make the effort to protect our vision.

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Editor

Swine Flu

G. Srinivasan*

Pigs can get influenza (flu), but swine flu viruses aren't the same as human flu viruses. Swine flu doesn't often infect people, and the rare human cases that have occurred in the past have mainly affected people who had direct contact with pigs. But the current "swine flu" outbreak is different. It's caused by a new swine flu virus that has changed in ways that allow it to spread from person to person -- and it's happening among people who haven't had any contact with pigs.

Swine influenza (also called swine flu, hog flu, and pig flu) is an infection by any one of several types of swine influenza virus. Swine influenza virus (SIV) is any strain of the influenza family of viruses that is endemic in pigs. As of 2009, the known SIV strains include influenza C and the subtypes of influenza A known as H1N1, H1N2, H3N1, H3N2, and H2N3.

Classification

The three genera of influenza viruses that cause human flu, two also cause influenza in pigs, with influenza A being common in pigs and influenza C being rare. Influenza B has not been reported in pigs. Within influenza A and influenza C, the strains found in pigs and humans are largely distinct, although due to reassortment there have been transfers of genes among strains crossing swine, avian, and human species boundaries.

Epidemiology

The agent genetic sequencing shows a new sub type of influenza A (H1N1) virus with segments from four influenza viruses: North American Swine, North American Avian, Human Influenza and Eurasian Swine.

The majority of the cases have occurred in otherwise healthy young adults.

The transmission is by droplet infection and fomites.

Incubation period is 1-7 days.

Communicability is from 1 day before to 7 days after the onset of symptoms. If illness persists for more than 7 days, chances of communicability may persist till resolution of illness. Children may spread the virus for a longer period. There is substantial gap in the epidemiology of the novel virus which got re-assorted from swine influenza.

Transmission

Transmission between pigs

Influenza is quite common in pigs, with about half of breeding pigs having been exposed to the virus in the US. Antibodies to the virus are also common

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in pigs in other countries. The main route of transmission is through direct contact between infected and uninfected animals. These close contacts are particularly common during animal transport.

Intensive farming may increase the risk of transmission, as the pigs are raised in very close proximity to each other. The direct transfer of the virus probably occurs either by pigs touching noses, or through dried mucus. Airborne transmission through the aerosols produced by pigs coughing or sneezing are also an important means of infection. The virus usually spreads quickly through a herd, infecting all the pigs within just a few days. Transmission may also occur through wild animals, such as wild boar, which can spread the disease between farms.

Transmission to humans

People who work with poultry and swine, especially people with intense exposures, are at increased risk of zoonotic infection with influenza virus endemic in these animals, and constitute a population of human hosts in which zoonosis and reassortment can co-occur. Vaccination of these workers against influenza and surveillance for new influenza strains among this population may therefore be an important public health measure. Transmission of influenza from swine to humans who work with swine was documented in a small surveillance study performed in 2004 at the University of Iowa. This study among others forms the basis of a recommendation that people whose jobs involve handling poultry and swine be the focus of increased public health surveillance. Other professions at particular risk of infection are veterinarians and meat processing workers, although the risk of infection for both of these groups is lower than that of farm workers.

Swine Flu High Risk Groups

With regular seasonal flu, infants and the elderly are usually thought to be most at risk for serious infections, in addition to people with chronic medical problems. Swine flu high risk groups, people who are thought to be at risk for serious, life-threatening infections, are a little different and can include:

- Pregnant women
- People with chronic medical problems, such as chronic lung disease, like Asthma, cardiovascular disease, diabetes, and immunosuppressant
- Children and adults with obesity

Clinical features

Important clinical features of swine influenza include fever, and upper respiratory symptoms such as cough and sore throat. Head ache, body ache, fatigue diarrhea and vomiting have also been observed.

There is insufficient information to date about clinical complications of this variant of swine origin influenza A (H1N1) virus infection. Clinicians should expect complications to be similar to seasonal influenza: sinusitis, otitis media, croup, pneumonia, bronchiolitis, status asthamaticus, myocarditis, pericarditis, myositis, rhabdomyolysis, encephalitis, seizures, toxic shock syndrome and secondary bacterial pneumonia with or without sepsis. Individuals at extremes of age and with preexisting medical conditions are at higher risk of complications and exacerbation of the underlying conditions.

In swine

In pigs influenza infection produces fever, lethargy, sneezing, coughing, difficult breathing and decreased appetite. In some cases the infection can cause abortion. Although mortality is usually low (around 1-4%), the virus can produce weight loss and poor growth, causing economic loss to farmers. Infected pigs can lose up to 12 pounds of body weight over a 3 to 4 week period.

In humans

According to the CDC, like seasonal flu, symptoms of swine flu infections can include:

- fever, which is usually high, but unlike seasonal flu, is sometimes absent
- cough
- runny nose or stuffy nose
- sore throat
- body aches
- headache
- chills
- fatigue or tiredness, which can be extreme
- diarrhea and vomiting, sometimes, but more commonly seen than with seasonal flu

Serious Swine Flu symptoms

More serious symptoms that would indicate that a child with swine flu would need urgent medical attention include:

- Fast breathing or trouble breathing
- Bluish or gray skin color
- Not drinking enough fluids
- Severe or persistent vomiting
- Not waking up or not interacting
- Being so irritable that the child does not want to be held

Flu-like symptoms improve but return

with fever and worse cough

Investigations

Routine investigations required for evaluation and management of a patient with symptoms as described above will be required. These may include haematological, biochemical, radiological and microbiological tests as necessary.

Confirmation of influenza A (H1N1) swine origin infection is through:

- Real time RT PCR or
- Isolation of the virus in culture or
- Four-fold rise in virus specific neutralizing antibodies

For confirmation of diagnosis, clinical specimens such as nasopharyngeal swab, throat swab, nasal swab, wash or aspirate, and tracheal aspirate (for intubated patients) are to be obtained. The sample should be collected by a trained physician / microbiologist preferably before administration of the antiviral drug. Keep specimens at 4°C in viral transport media until transported for testing. The samples should be transported to designated laboratories with in 24 hours. If they cannot be transported then need to be stored at -70°C. Paired blood samples at an interval of 14 days for serological testing should also be collected.

Treatment

The guiding principles are:

- ♦ Early implementation of infection control precautions to minimize nosocomical / household spread of disease
- ♦ Prompt treatment to prevent severe illness & death.
- ♦ Early identification and follow up of persons at risk.

Infrastructure / manpower / material support

- Isolation facilities: If dedicated isolation room is not available then patients can be cohorted in a well ventilated isolation ward with beds kept one metre apart.
- Manpower: Dedicated doctors, nurses and paramedical workers.
- Equipment: Portable X Ray machine, ventilators, large oxygen cylinders, pulse oxymeter
- Supplies: Adequate quantities of PPE, disinfectants and medications (Oseltamivir, antibiotics and other medicines)

Standard Operating Procedures

- Reinforce standard infection control precautions i.e. all those entering the room must use high efficiency masks, gowns, goggles, gloves, cap and shoe cover.
- Restrict number of visitors and provide them with PPE.
- Provide antiviral prophylaxis to health care personnel managing the case and ask them to monitor their own health twice a day.
- Dispose waste properly by placing it in sealed impermeable bags labeled as Bio- Hazard.

Oseltamivir Medication

- Oseltamivir is the recommended drug both for prophylaxis and treatment.
- Dose for treatment is as follows:
  - ➤ By Weight:
  - – For weight <15kg
    30mg BD for 5 days
  - – 15-23kg
    45 mg BD for 5 days
  - – 24-<40kg
    60 mg BD for 5 days
  - – >40kg
    75 mg BD for 5 days
  - ➤ For infants:
  - – < 3 months
    12 mg BD for 5 days
  - – 3-5 months
    20 mg BD for 5 days
  - – 6-11 months
    25 mg BD for 5 days

  It is also available as syrup (12mg per ml)

  If needed dose & duration can be modified as per clinical condition.

Supportive therapy

- – IV Fluids.
- – Parental nutrition.
- – Oxygen therapy/ ventilator support.
- – Antibiotics for secondary infection.
- – Vasopressors for shock.
- – Paracetamol or ibuprofen is prescribed for fever, myalgia and headache. Patient is advised to drink plenty of fluids. Smokers should avoid smoking. For sore throat, short course of topical decongestants, saline nasal drops, throat lozenges and steam inhalation may be beneficial.
- – Salicylate / aspirin is strictly contra-indicated in any influenza patient due to its potential to cause Reye's syndrome.
- – The suspected cases would be constantly monitored

for clinical / radiological evidence of lower respiratory tract infection and for hypoxia (respiratory rate, oxygen saturation, level of consciousness).

– Patients with signs of tachypnea, dyspnea, respiratory distress and oxygen saturation less than 90 per cent should be supplemented with oxygen therapy. Types of oxygen devices depend on the severity of hypoxic conditions which can be started from oxygen cannula, simple mask, partial re-breathing mask (mask with reservoir bag) and non re-breathing mask. In children, oxygen hood or head boxes can be used.

– Patients with severe pneumonia and acute respiratory failure (SpO2 < 90% and PaO2 <60 mmHg with oxygen therapy) must be supported with mechanical ventilation. Invasive mechanical ventilation is preferred choice. Non invasive ventilation is an option when mechanical ventilation is not available. To reduce spread of infectious aerosols, use of HEPA filters on expiratory ports of the ventilator circuit / high flow oxygen masks is recommended.

– Maintain airway, breathing and circulation (ABC);

– Maintain hydration, electrolyte balance and nutrition.

– If the laboratory reports are negative, the patient would be discharged after giving full course of oseltamivir. Even if the test results are negative, all cases with strong epidemiological criteria need to be followed up.

– Immunomodulating drugs have not been found to be beneficial in treatment of ARDS or sepsis associated multi organ failure. High dose corticosteroids in particular have no evidence of benefit and there is potential for harm. Low dose corticosteroids (Hydrocortisone 200-400 mg/ day) may be useful in persisting septic shock (SBP < 90).

– Suspected case not having pneumonia does not require antibiotic therapy. Antibacterial agents should be administered, if required, as per locally accepted clinical practice guidelines. Patient on mechanical ventilation should be administered antibiotics prophylactically to prevent hospital associated infections.

Chemo Prophylaxis

- All close contacts of suspected, probable and confirmed cases. Close contacts include household /social contacts, family members, workplace or school contacts, fellow travelers etc.
- All health care personnel coming in contact with suspected, probable or confirmed cases
- Oseltamivir is the drug of choice.
- Prophylaxis should be provided till 10 days after last exposure (maximum period of 6 weeks)
  - ➤ By Weight:
  - – For weight<15kg 30 mg OD
  - – 15-23kg 45 mg OD
  - – 24-<40kg 60 mg OD
  - – >40kg 75 mg OD
  - For infants:
  - – <3 months not recommended unless situation judged critical due to limited data on use in this age group
  - – 3-5 months 20 mg OD
  - – 6-11 months 25 mg OD

Non-Pharmaceutical Interventions

- ♦ Close contacts of suspected, probable and confirmed cases should be advised to remain at home (voluntary home quarantine) for at least 7 days after the last contact with the case. Monitoring of fever should be done for at least 7 days. Prompt testing and hospitalization must be done when symptoms are reported.
- ♦ All suspected cases, clusters of ILI/SARI cases need to be notified to the State Health authorities and the Ministry of Health & Family Welfare, Govt. of India (Director, EMR and NICD)

Swine Flu Vaccine

It is estimated that the swine flu vaccine won't be ready until sometime around September to November 2009. In addition to the time required to actually make a new vaccine, the likely need to make seasonal flu vaccine for next year may delay things a little.

CDC's Advisory Committee on Immunization Practices (ACIP) recommends that swine flu vaccine should first go to:

- Pregnant women
- Household contacts and caregivers for children younger than 6 months of age
- Healthcare and emergency medical services personnel
- All children and young adults from 6 months through 24 years of age, and
- Persons aged 25 through 64 years who have health

conditions associated with higher risk of medical complications from influenza

As swine flu vaccine quantity improves to the point that all priority groups have got vaccinated, everyone from the ages of 25 through 64 years will get vaccinated too. Lastly, people 65 or older, who have the least risk from the swine flu will be offered the swine flu vaccine.

Prevention

Prevention of swine influenza has three components: prevention in swine, prevention of transmission to humans, and prevention of its spread among humans.

Social distancing is another tactic. It means staying away from other people who might be infected and can include avoiding large gatherings, spreading out a little at work, or perhaps staying home and lying low if an infection is spreading in a community. Public health and other responsible authorities have action plans which may request or require social distancing actions depending on the severity of the outbreak.

Infection Control

Recommended Infection Control for a non-hospitalized patient (ER, clinic or home visit):

Separation from others in single room if available until asymptomatic. If the ill person needs to move to another part of the house, they should wear a mask. The ill person should be encouraged to wash hands frequently and follow respiratory hygiene practices. Cups and other utensils used by the ill person should be thoroughly washed with soap and water before use by other persons.

Nursing Management

The following are nursing interventions of swine flu:

- Standard precautions are to be followed while transporting patient to a health-care facility. The patient should also wear a three layer surgical mask.
- Aerosol generating procedures should be avoided during transportation as far as possible.
- The personnel in the patient's cabin of the ambulance should wear full complement of PPE including N95 masks, the driver should wear three layered surgical mask.
- Once the patient is admitted to the hospital, the interior and exterior of the ambulance and reusable patient care equipment needs to be sanitized using sodium hypochlorite / quaternary ammonium compounds.
- Recommended procedures for disposal of waste (including PPE used by personnel) generated in the ambulance while transporting the patient should be followed.
- The patient should be admitted directly to the isolation facility and he/she should continue to wear a three layer surgical mask.
- The identified medical, nursing and paramedical personnel attending the suspect/ probable / confirmed case should wear full complement of PPE (including N95 mask). If splashing with blood or other body fluids is anticipated, a water proof apron should be worn over the PPE.
- Aerosol-generating procedures such as endotracheal intubation, nebulized medication administration, induction and aspiration of sputum or other respiratory secretions, airway suction, chest physiotherapy and positive pressure ventilation should be performed by the treating physician/ nurse wearing full complement of PPE with N95 respirator on.
- Sample collection and packing should be done under full cover of PPE.
- Perform hand hygiene before and after patient contact and following contact with contaminated items, whether or not gloves are worn.
- Until further evidence is available, infection control precautions should continue in an adult patient for 7 days after resolution of symptoms and 14 days after resolution of symptoms for children younger than 12 years because of longer period of viral shedding expected in children. If the patient insists on returning home, after resolution of fever, it may be considered, provided the patient and household members follow recommended infection control measures and the cases could be monitored by the health workers in the community.
- The virus can survive in the environment for variable periods of time (hours to days). Cleaning followed by disinfection should be done for contaminated surfaces and equipments.
- The virus is inactivated by a number of disinfectants such as 70% ethanol, 5% benzalkonium chloride (Lysol) and 10% sodium hypochlorite. Patient rooms/areas should be cleaned at least daily and finally after discharge of patient. In addition to daily cleaning of floors and other

horizontal surfaces, special attention should be given to cleaning and disinfecting frequently touched surfaces. To avoid possible aerosolization of the virus, damp sweeping should be performed. Horizontal surfaces should be dusted by moistening a cloth with a small amount of disinfectant.

- Clean heavily soiled equipment and then apply a disinfectant effective against influenza virus (mentioned above) before removing it from the isolation room/area. If possible, place contaminated patient-care equipment in suitable bags before removing it from the isolation room/area.
- When transporting contaminated patient-care equipment outside the isolation room/area, use gloves followed by hand hygiene. Use standard precautions and follow current recommendations for cleaning and disinfection or sterilization of reusable patient-care equipment.
- All waste generated from influenza patients in isolation room/area should be considered as clinical infectious waste and should be treated and disposed in accordance with national regulations pertaining to such waste. When transporting waste is outside the isolation room/area, gloves should be used followed by hand hygiene.

Discharge Policy

- Adult patients should be discharged 7 days after symptoms have subsided.
- Children should be discharged 14 days after symptoms have subsided.
- The family of patients discharged earlier should be educated on personal hygiene and infection control measures at home; children should not attend school during this period.

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CORRECTION

In the *Nightingale Nursing Times* of September 2009 on page 9, the article: "Nursing Informatics and its Application in Nursing" is by Simer Preet Kaur, Lecturer, SRMM College of Nursing, Sawangi,Wardha.

Problems and Coping Strategies of Blind Children

K .Sunilkumari

The World Health Organization (W.H.O) estimates that for every five seconds, someone goes blind, but a child goes blind every single minute. At risk are those below five year old. Worldwide, 37 million people are blind; 124 million are severely visually impaired. Ninety per cent of the world's blind live in developing countries. The WHO estimates that 75 per cent of all blindness can be prevented, treated or cured.

"The best and most beautiful things in the world cannot be seen or even touched. They must be felt within the heart" *- Helen Keller*

Childhood is a blissful state of innocence and joy but this is often not for the children, who are disabled. When they play, laugh; they feel isolated, as no one is beside them to hear or bear, as everyday in their life is a big struggle. Disability is proven to be a big hindrance in the normal day-to - day life of a place of negligence, despair and isolation. But there is hope always in everyone's' life. One of the goals of our nation is, to have happy and healthy children who can live and express their full potential. As per THE PERSONS WITH DISABILITY ACT 1995, Government provides education, employment, creation of barrier free environment and social security to the disabled.

Need for the Study

Blindness is regarded as the most severe and traumatic physical handicap. It results from any interference with the passage of light stimulus, as it travels from the outer surface to the inner surface and to the brain.

Visually handicapped children are a highly heterogeneous group.They face many problems like behavioural problems, problems of social adjustment, problems in learning, poor intelligence, academic difficulties, slower speech etc., This is supported by a study conducted on comparison of divergent development of gross motor skills in children who were blind and sighted. The results revealed that forty five per cent of visually handicapped children had strong developmental delays in the observed skills and about twenty eight per cent in extreme developmental delay.

Scientific research began 20 to 30 years ago, but recent interest in technology by the society is reflected in the literature on the blind, as a large proportion of the research is devoted to various visual and mobility aids. Longitudinal research is also needed on the behaviour, psychosocial development of children.

Statement of the problem

A study to assess the problems and coping strategies of blind children in selected blind schools of Raichur.

Objectives

- To assess the physical and social problems of blind children.
- To assess the coping strategies of blind children.
- To find out the relationship between occurrence of physical and social problems with their socio-demographic variables.
- To identify the relationship between coping strategies utilized by blind children with their socio-demographic variables.

Method

Design, Sample and Setting

A descriptive design was used to assess the physical and social problems and coping strategies of blind children. Purposive sampling was used to collect data from 100 blind children from the two blind schools in Raichur, Karnataka, namely Shri Manik Prabhu Academy for the Blind and Assisi Deepthi Organization for Rehabilitation,

Lecturer, St. Joseph's College of Nursing, Guntoor, Andhra Pradesh.

Raichur.

Instrument and Data Collection

A check list was used to assess the physical and social problems of blind children which consisted of 14 items each and coping scale developed by Lazarus & Folkmaan (1986) which was modified and used to assess coping strategies of blind children. Reliability was established by split half reliability method and Spearman's coefficient correlation for the instrument was 0.94. The ethical permission was obtained from the two institutions. The oral consent was obtained from the study participants. The check list was filled up by the investigator by using structured Interview Schedule in local language (Kannada).

Data Analysis

Descriptive statistics and inferential statistics like chi-square were used to find out the association between problems and coping strategies of blind children.

Study Findings

Analysis of physical and social problems

- Regarding orientation and mobility, half of the sample (52%) had problems such as 60% not going outside alone, 56% unable to travel by bus alone 52% unable to climb zigzag stairs, 52% experienced fear by going to unknown places and 40 % not using long cane.
- About one third of the respondents' (34 %) academic performance was poor like 40% had difficulty in accessing print books, 44% cannot access news paper, 32% had difficulty in using Braille, 28% had difficulty in learning new skill and 24% were not using the computer.
- Nearly one fourth of the sample (26%) had difficulty to carry out daily living skills such as 36% shown hesitation to meet strangers and no interaction with opposite sex, 28% were not carrying out daily living skills.
- Regarding social problems, nearly three fourth of the respondents (71%) had social problems such as not having enough toys to play and not having talking watch and 68% were not taking part in activities like dancing, playing instruments.

The mean score for the problems of blind children was highest for the respondents, who belonged to the age group 6-8 years ($\bar{x}$ = 11.9, SD= 2.3) ; female ($\bar{x}$ = 9.72, SD = 3) ; 1-3 class ($\bar{x}$ = 11.8, SD =2.52) ; nuclear family ($\bar{x}$ = 9.38, SD = 2.83), single child in the family ($\bar{x}$ = 11.5, SD =3.05), blind sibling in the family ($\bar{x}$ = 11, SD = 4.09) ; with monthly family income less than Rs 3000 ($\bar{x}$ = 9.64, SD = 3.46); parents up to secondary education (father $\bar{x}$ = 9.9, SD =2.3; mothers $\bar{x}$ = 10.5, SD = 2), and occupation of parents fathers($\bar{x}$ = 9.8, SD = 3.13), mothers ($\bar{x}$ = 9.76, SD = 3.09).

Analysis of coping strategies

Nearly three fourth (88 %) of children adopted coping strategies to pray GOD, 80 % were taking help from others, 68 % were trying to solve problems with own efforts, 68 per cent were thinking through different ways to solve the problem, 48 per cent were thinking about the past experience to handle the problem, 46 per cent were become depressed, angry and 40 per cent felt helpless and cried.

The mean score of coping strategies was highest for the blind children who were female ($\bar{x}$ = 5.19, SD = 0.99); 9-11 years ($\bar{x}$ = 5.30, SD = 1.04); joint family ($\bar{x}$ = 5.5, SD = 0.5); family income less than Rs 3000= 5.3, SD = 1.04); Illiterate fathers ($\bar{x}$ = 6.12, SD = 1.56); primary educated ($\bar{x}$ = 5.13, SD = 0.33); coolie (fathers$\bar{x}$ = 5.2, SD = 1.13; mothers $\bar{x}$ = 5.2, SD = 1.1).

Relationship of the blind children problems with their socio – demographic variables

There was a significant relationship between problems scores and education (χ^2 = 7.8), number of children (χ^2 = 4.7), family type (χ^2 = 3.9) and disabled sibling in the family (χ^2 = 15.83). Hence, the research hypotheses H3, H5, H6, and H8 were accepted.

Insignificant relationship was found between problems scores and age (χ^2 = 0.012), sex (χ^2 = 0.053), monthly family income (χ^2 = 0.0268), education of parents (father χ^2 = 0.12, mothers χ^2 = 0.012), and occupation of parents (fathers χ^2 = 1.069, mothers χ^2 = 0.99). Hence, the research null hypotheses H01, H02, H04, and H07 were accepted.

Relationship of the blind children coping strategies with their socio – demographic variables

There was a significant relationship between coping strategies of blind children, number of children (χ^2 = 8.02) and education of fathers (χ^2= 5.10). Hence, the research hypothesis H 14 and H17 were retained.

Insignificant relationship was found between coping scores and age (χ^2 = 0.99), gender (χ^2= 0.031), education of child (χ^2 = 0.02), type of family (χ^2 = 0.76), disabled sibling in the family (χ^2 = 0.36), monthly family income (χ^2 = 0.28), education of mothers (χ^2 = 2.75) and occupation of parents (fathers χ^2 = 2.31, mothers χ^2 = 1.66). Hence, the research null hypotheses H010, H011, H012, H013, H016,

H015, H017, and H018 were retained.

Implications

Nursing Practice

- Management of blind school can appoint a nurse to provide first aid services.
- Nurse as a guide and counselor to help the blind children in the selection of various courses of study for different vocations depending upon the learning aptitudes.
- Nurses should organize daily life skills training to help the children to face the challenges of living in a society.

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Continued from Page 44

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Selected letters would be published after editing depending upon the availability of space.

We look forward to hearing from you.

Editor

Quality of Life in Patients with Psoriasis

Padmavathi Nagarajan* and Mariette D'Souza**

Quality Of Life (QOL) is a multidimensional concept that encompasses the physical, psychological, social, spiritual, sexual and occupational well being of a person. The medically focused aspect of QOL is referred to as Health Related Quality Of Life (HRQOL)) and it reflects patient's subjective evaluation of the effects of a disease. Psoriasis is a chronic skin disease which interferes with various aspects of QOL such as personal and social interactions, sexuality, self-care activities and activities of daily living. Psoriasis related stigmatization, physical disability and psychological distress also adversely affect the QOL in patients with Psoriasis.

Definition of QOL

The degree to which a person enjoys the important possibilities of his or her life. (The Centre for Health Promotion, University of Toronto).

The degree of satisfaction of particular life needs, both by externally visible standards and by the individual's perception. (Hornquist JO, 1982).

Definition of HRQOL

The value assigned to the duration of life as modified by the social opportunities, perceptions, functional status and impairments that are influenced by disease, injuries, treatment or policy.

Determinants of HRQOL

1. Health care, health habits, health knowledge and attitudes and use of health services.
2. Social networks and resources.
3. Economical, educational and psychological resources.

Domains of QOL

- Physical status
- Psychological status
- Social interaction
- Economical status

Psoriasis related QOL issues

- Disability in areas of everyday life
- Level and type of stress
- Areas of self-reported physical and mental health

Determinants of QOL in patients with Psoriasis

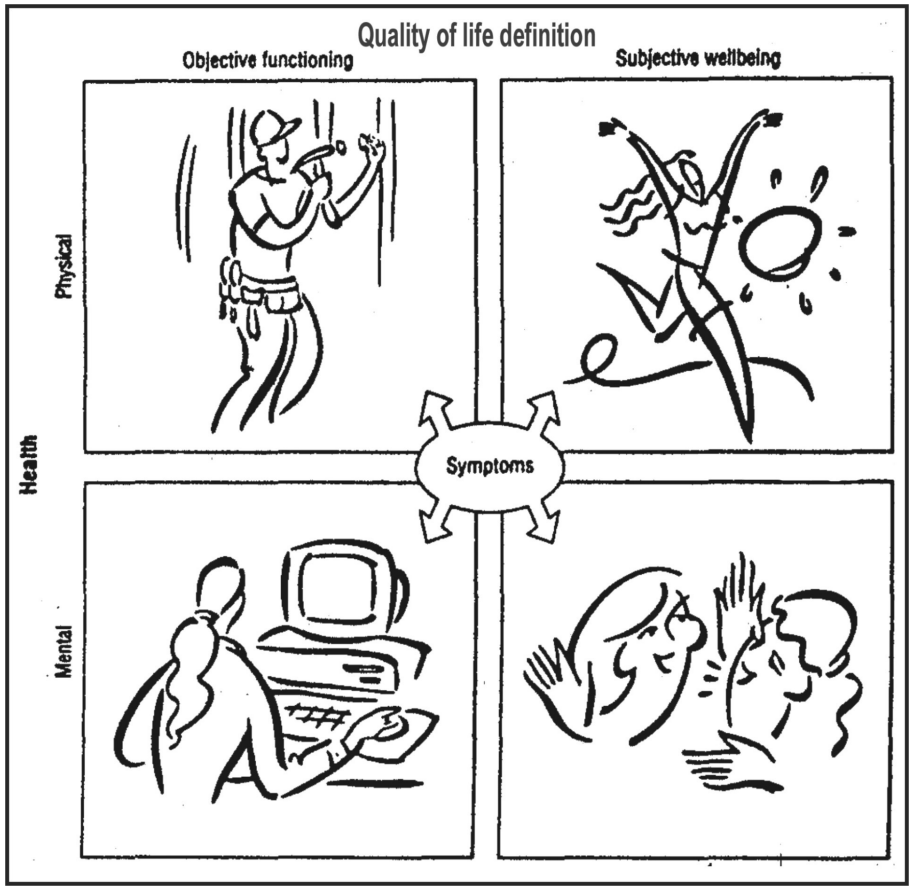
- Chronic and recurring nature of the disease and absence of a permanent cure lead to a feeling of hopelessness in terms of cure for Psoriasis.
- Unexpected outbreak of symptoms (Psoriasis flares) interferes with the future plans of patients and results in lack of control over the disease.
- The visibility of skin lesions and the cosmetic disfigurement lower the level of self-confidence and affect the body image and self-esteem.
- Physical symptoms such as itching, irritation, tenderness, pain, insomnia and inability to use the hands may affect the physical well-being of patients.
- Feelings of embarrassment, frustration, anger, depression, suicidal ideations, anticipation of rejection are frequently experienced by patients with Psoriasis which disrupt their psychological well-being.

** Ph.D Scholar, Rani Meyyammai College of Nursing, Annamalai University, Chidambaram and **Professor, Department of Dermatology, JIPMER, Pudhucherry.*

- Inhibition in going to social functions, shaking hands and the necessity of wearing certain types of clothing to hide the lesions are some of the areas which affect the social activities.
- Feelings of physical unattractiveness lead to less sexual activity.
- Inability to get certain jobs, loss of working days due to Psoriasis flares, loss of productivity are some of the occupational issues concerned with Psoriasis.
- Social stigma, financial burden and care-giver stress are other aspects which affect quality of life.

Nursing measures to improve QOL in Psoriasis

- Establish a trusting and therapeutic nurse-patient relationship for better treatment outcome.
- Be empathetic when working with the patient.
- Change patient's pessimistic and helpless attitude by improving their self-efficacy.
- Encourage active coping strategies.
- Promote social support.
- Focus on multidisciplinary treatment options.
- Adopt an integrated approach in screening and treating Psoriasis.
- Develop nursing scales to assess QOL in clinical practice.
- Motivate and counsel patients for treatment compliance.
- Conduct individual and group psychotherapy.



Conclusion

A better understanding of factors influencing quality of life is essential in evaluating patient's overall well-being. Nurses can play a pivotal role in improving the QOL of patients with Psoriasis by effectively involving the multidisciplinary care.

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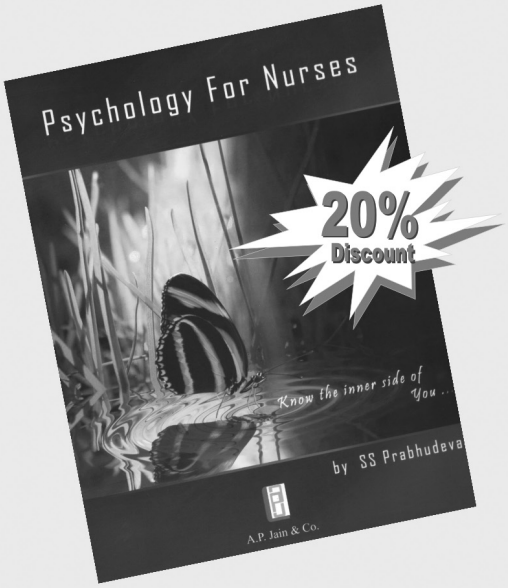

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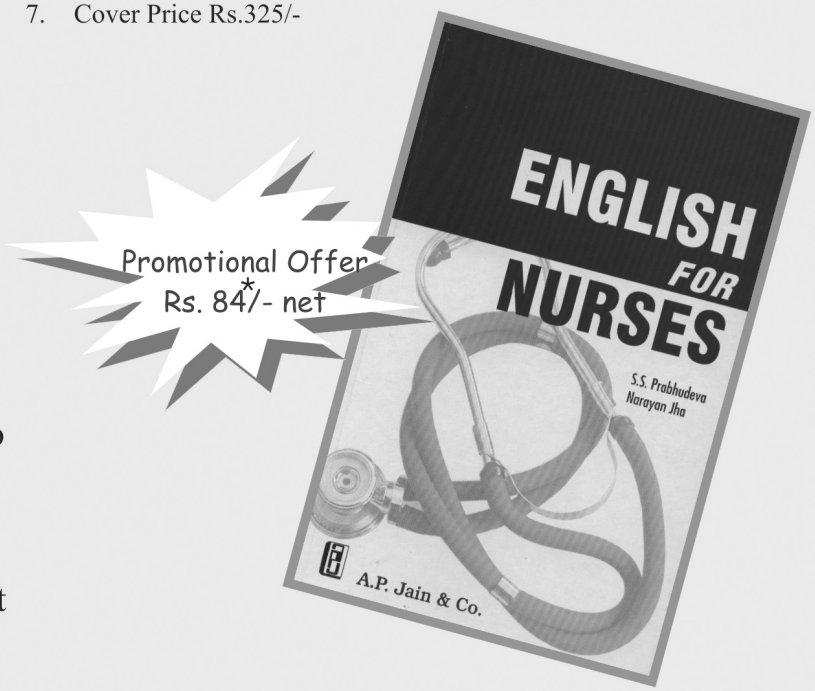

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A few Solved Questions for CGFNS Qualifying Examination

Adapted from the book CGFNS Qualifying Exams published by CGFNS, Philadelphia, USA

1. A woman who has type 1 diabetes asks a nurse, "How will this pregnancy affect my insulin needs?" The nurse's response would be based on the understanding that insulin needs during pregnancy will

A. decrease prior to the onset of labor.

B. remain the same throughout gestation.

C. increase during the first trimester.

D. increase during the third trimester.

2. A patient who has low back pain says to a nurse, "I feel the pain down to my ankle."Which of the following actions would the nurse take first?

A. Teach muscle-relaxing exercises

B. Encourage frequent rest periods

C. Assess sensation of the lower extremities

D. Administer the prescribed pain medication

3. Which of the following statements, if made by a patient who had a total hip replacement, would indicate to a nurse that the discharge teaching has been effective?

A. “I will need to buy an exercise bike.”

B. “I can bend to tie my shoelaces."

C. “I can sit with my legs crossed at the knee".

D. "I will need to make my toilet seat higher.”

4. Which of the following statements, if made by the parent of an 18-monlh-old child who has experienced two episodes of febrile seizures, is accurate?

A. "My child will have lo rake anti-seizure medicine".

B. "I made an appointment to see a genetic counselor".

C. "My child will probabfy out grow these seizures."

D. "I've made arrangements to have oxygen equipment at home."

5. Which of the following statements would a nurse include in the preoperctive instructions for a patient who is scheduled for an ileostomy?

A. "Your urine will be collected in a pouch subsequent to surgery.”

B "Your bowel will be visualized with a laparoscope during surgery."

C. "You will have a nasogastric tube in your nose after surgery."

D. "You can drink liquids within 24 hours following surgery."

6. Which or the following findings would be the earliest indicator of fluid volume deficit in a nine-month-old infant who is five percent dehydrated?

A. Increased heart rate

B. Increased urine specific gravity

C. Decreased urinary output

D. Decreased blood pressure

7. A laboring woman’s husband assists her during the transitional phase of labor. Which of the following behaviors if exhibited by the husband, would require intervention by a nurse?

A. Offers the woman a bedpan when she says she needs to have a bowel movement

B. Gives ice chips to the woman when she says her mouth is dry

C. Provides effleurage when the woman complains of intense abdominal pain

D. Encourages the woman to fix her gaze on him when she experiences a contraction.

8. Which of the following actions should a nurse take during the pre-Interactlon phase of the nurse-patient relationship?

A. Exploring personal feelings regarding care of the mental health patient

B. Establishing boundaries for the patient and the nurse

C. Determining if the patient's problems result from stressors

D. Identifying goals and strategies.

9. Which of the following factors, if noted in a patient's history, would predispose the patient to the development of diverticulitis?

A. Occupational stress

B. Cigarette smoking

C. Low-fiber diet

D. Sedentary lifestyle

10. Which of the following findings would a nurse expect to assess in an elderly patient who has urinary retention?

A. Burning on urination

B Hesitancy of urination

C. Blood in the urine

D. Foul odor of the urine

11. A patient is newly admitted to the psychiatric unit with a diagnosis of bipolar disorder, manic phase. Which of the following activities would be most appropriate for the patient?

A. Doing cross-word puzzles

B. Reading quietly in his/her room

C. Playing a game of table tennis

D. Working with modeling clay

12. Which of the following actions should a nurse include in the care plan for a patient who has water intoxication?

A. Measure urine specific gravity

B. Restrict salt in the diet

C. Chew gurn and hard candy

D. Avoid ingestion of water

13. A patient who has undergone surgery for creation of an ideal conduit is scheduled for discharge. To determine if the patient will be able to manage self-care at home, a nurse would assess the patient's ability to

A. irrigate the stoma opening.

B. change the stoma appliance.

C. catheterize the stoma pouch.

D. apply pressure dressings over the stoma.

14. It is suspected that a patient has, a stone in the ureter. Which of the following manifestations would help a nurse confirm the diagnosis?

A. Abdominal distention

B. Elevated temperature

C. Scanty output of urine

D. Pain radiating to the groin

15. Which of the following manifestations would be most significant when assessing a woman for evidence of true labor?

A. Spontaneous rupture of membranes

B. Progressive cervical dilatation

C. Intermittent uterine contractions

D. Passage of the mucous plug

Answer

1. Key: D Client Need: Physiological Integrity

D. Early in pregnancy, a woman may need less insulin because the fetus is taking so much glucose from the mother for rapid cell growth. Later in pregnancy she will need an increased amount because of increased metabolic need.

A. The patient may need insulin infusions to maintain serum glucose levels. Serum glucose levels should be obtained every one to two hours.

B. During the second and third trimesters, because of insulin resistance, the dosage may be increased to maintain target glucose levels.

C. Early in the pregnancy, maternal insulin needs decrease due to rapid fetal cell growth.

2. Key: C Client Need: Physiological Integrity

C. In cases of low back pain, the nurse should assess for sensory changes by asking whether there is paresthesia or numbness in the involved limb. The nurse should test both extremities for sensation by using a pin or paper clip and a cotton ball fur comparison of light and deep touch.

A. B and D.

Prior to implementing these nursing interventions, the nurse should perform an assessment of the patient to identify his/her needs

3. Key: D Client Need: Physiological Integrity

D. Extremes of internal rotation, adduction and 90° flexion of the hip must be avoided for four to six weeks postoperatively. Elevated toilet seats al home are necessary to prevent hip flexion.

A. B and C.

All of these actions are contraindicated for the patient who has had a total hip replacement because of the restriction on hip movement postoperatively

4. Key: C Client Need: Physiological Integrity

C. Although most children never have febrile seizures after the first occurrence, a younger age at onset and a family history of febrile seizures arc associated with recurring episodes. Most children outgrow febrile seizures by five years of age.

A. Phenobarbital is ineffective in preventing febrile seizures and can cause a drop in intelligence scores

B. Boys are affected about twice as often as girls and there appears to be an increased susceptibility in families, indicating a possible genetic predisposition. Given the benign nature of the illness, genetic

counseling is not necessary

D. Most febrile seizures last for a very short period. If seizure activity persists, it is usually treated with rectal or intravenous Valium rather than oxygen.

5. Key:C Client Need: Physiologically Integrity

C. The nurse should explain the need for, and function of, all tubes and drains: nasogastric, intravenous and wound. Nasogastric suction is maintained for four to five days after surgery, and the patient is given nothing by mouth to prevent distention und pressure on the suture line.

A. Ileum drainage, rather than urine, is collected in the pouch.

B. The patient should be aware that the surgery involves an abdominal incision.

D. The patient will be NPO following surgery.

6. Key: A Client Need: Physiological Integrity

A. Mild isotonic dehydration is associated with a five percent weight loss or fluid deficit up to 50 ml/kg. Tachycardia will be present but the blood pressure and respiratory rate should be normal.

B. Increased urine specific gravity is not an early sign of fluid volume deficit.

C. Decreased urine output is not the earliest sign of fluid volume deficit

D. Blood pressure remains normal in five percent dehydration.

7. Key: A Client Need: Health Promotion and Maintenance

A. During transition the laboring woman has an uncontrollable urge to push or bear down with contractions as if she were going to move her bowels. With that action, the perineum begins to bulge for delivery of the baby.

B. A woman may have a dry mouth or dry lips during labor, but large oral intake is discouraged during this time. Ice chips are generally enough to relieve this discomfort.

C. Effleurage, or light massage, can decrease the pain sensation during labor.

D. Focusing intently on an object is another method of keeping sensory input from the cortex of the brain and displacing pain sensation.

8. Key: A Client Need: Physiologically Integrity

A. The nurse's initial task is one of self-exploration and examination of one's fears, feelings and anxieties about working with a patient. This initial phase is called the pre-orientation or pre-interaction phase.

B. and D

Establishing boundaries and setting goals are tasks of the orientation or introductory phase of the therapeutic relationship in which the nurse and patient become acquainted, assessment information is gathered and expectations identified.

C. Determining the cause of the patient's problems is a task of the working phase of the therapeutic relationship during which the patient's insight and perception of reality are promoted.

9. Key: C Client Need: Physiological Integrity

C. There is no known cause of diverticular disease, but deficiency in dietary fiber has been implicated in its development.

A. B and D.

Occupational stress, cigarette smoking and a sedentary lifestyle have not been associated with the development of diverticulitis.

10. Key: B Client Need: Physiological Integrity

B. The nurse should assess the pattern of urination: frequency, number of times voiding per night, urgency and acute urinary retention. Symptoms of gradual obstruction include a decrease in the urinary stream with less force on urination and dribbling at the end of urination. Hesitancy or difficulty in starting the stream is seen.

A. Burning frequently accompanies urinary tract infections.

C. Blood in the urine may be due to a malignancy, infection or a side effect of medications

D. Foul odor of urine is usually indicative of a urinary tract infection,

11. Key: D Client Need: Psychosocial Integrity

D. Working with modeling clay allows for gross motor movements and does not require attention to detail. It would be an appropriate activity for the patient with a diagnosis of mania.

A. Puzzles require a level of concentration that the patient with mania usually does not have.

B. Manic patients usually have difficulty sitting still. Reading quietly would not be an appropriate activity.

C. Competitive games, such as table tennis, may be too stimulating for the patient and may result in loss of control.

12. Key: A Client Need: Physiological Integrity

A. By regularly monitoring the urine specific gravity of the patient at risk for water intoxication, the nurse can determine over hydration in the patient before dangerous consequences occur.

B. In over hydration the reabsorption of sodium in the renal tubule decreases, thus putting the patient at risk for hyponatremia. In those patients known lo be at risk for water intoxication, sodium tablets are sometimes given daily.

C. Chewing gum or sucking on hard candy may relieve some of the patient's compulsion to drink excess fluids. However, measuring urine specific gravity is the essential nursing intervention.

D. Adequate ingestion of water is to be encouraged for a patient with water intoxication.

13. Key: B Client Need: Physiological Integrity

B. The patient or caregiver must learn how to manage the assembly, application and emptying of the selected pouch. Before the patient is discharged from the hospital, the nurse must be certain that the individual can manage the urinary drainage and detect any deviations from normal.

A. and C.

Irrigation and catheterization of the stoma are not done

D. Since the drainage is urinary in nature, an appliance to collect the urine is needed over the stoma rather than dressings.

14. Key: D Client Need: Physiological Integrity

D. The pain that accompanies ureteral stones follows the anterior course of the ureter down to the suprapubic area and radiates to the external genitalia.

B. and C.

Symptoms of a ureteral stone include pain, nausea, vomiting, and at limes, hematuria.

15. Key: B Client Need: Physiological Integrity

B. Signs of true labor include regularly occurring uterine contraction, bloody show, rupture of membranes and progressive cervical dilatation. However, progressive cervical dilatation will occur only when a predictable, regular pattern of uterine contractions occurs.

A. Labor may or may not begin with rupture of the membranes. There is danger of infection if labor does not begin after membranes rupture.

C. Intermittent uterine contractions are known as Braxton-Hicks contractions and usually occur in the last days or weeks before labor begins.

D. Passage of the mucous plug occurs after the cervix begins to ripen or soften. This is a preliminary sign of labor. ■

Depression and Cognitive Impairment among old age people

Continued from Page 23

Elderly women of sixty-five years and over in Kerala were more compared with the men (Kerala F- 1851463; M-1484212). Women have better life expectancy than men and are married to men who are older. So the older age groups have larger proportion of widows. Hence they need provisions for long term care and support (Shaji & Ajitha, 2007).

The investigator found that majority (94.7%) of the old age people were suffering from one or more physical illnesses. Among the subjects majority 33.1 and 32.4 percentage of them were suffering from arthritis and hypertension respectively. Chacko and Joseph (1990) conducted a study to estimate the health problems of the elderly in rural south India. Among the elderly, 80 percent of the women and 20 percent of the men were widowed. Majority of them (55%) had visual problems (cataract), followed by orthopaedic problems. Chronic respiratory disorders were significantly more in men while orthopaedic problems were more in women. Of these 15.6 percent were hypertensive, 8.6 percent widows needed assistance in physical activities like bathing, toilet, and dressing, walking and eating.

A very interesting finding of the present study was that majority (73.4%) of old age people were having severe depression. Among the study subjects depression was more among female elderly (76.1%).

In an ICMR survey conducted in 1984-1985 on elderly persons over 60 years of age attending geriatric clinics in rural India, psychiatric problem was found to be 85%. About 6% the population met the criteria for major depressive disorder and 20% of them had symptoms that persist beyond two years.

Jain and Aras (2007) found that about 49.5% of the study population was having depression and among them 57.8% of them were females. The significant variables associated with depression were poor socio-economic status, marital status, non-working or dependency and illiteracy. Depressed elderly were inclined towards substance abuse, 58.13% had disturbed sleep patterns and mostly suffered from acute or

chronic illness (P<.05). Elderly suffering from acute or chronic illness showed higher prevalence (61.5%) of depression, (Hughes et al, 1992).

In the present study majority (74.66%) of the old age people had only primary education, a greater percentage (86%) of them were unemployed and most of them (53.3%) had no source of income. Ganguly et al (1999) found that illiteracy leads to unproductive life and cause greater difficulty in getting

General health status of the old age people.

Table 4: Frequency and percentage distribution of the old age people based on physical illness

N=150

Physical illness	F	%
Asthma	26	18.3
Hypertension	46	32.4
Cataract	21	14.8
Arthritis	47	33.1
Diabetes mellitus	31	218
Coronary Artery Disease	8	5.6
Mild hearing problem	9	6.3
Gastro intestinal problem	5	3.5
Orthopaedic problem	4	2.8
Neurological problem	4	2.8
Visual problem	8	5.6

It is observed from Table 4 that majority (94.7%) of the elderly are suffering from one or more physical illnesses.

Among the subjects, majority, 33.1 and 32.4 percentage of the elderly are suffering from arthritis and hypertension respectively.

Table 5: Frequency and percentage distribution of old age people according to emotional problem, sleep problem and type of treatment receiving.

N=150

Parameters	Frequency	Percentage
Emotional problem		
Present	4	2.6
Absent	146	97.4
Sleep problem		
Present	104	69.3
Absent	46	30.7
Type of treatment		
Allopathy	94	62.6
Ayurveda	13	8.7
Homeopathy	5	3.3
No treatment	38	25.4

Table 5 indicates that 69.3% of old age people are having sleep problem and 62.6% of them are receiving allopathic treatment for various health problems.

Table:6 Frequency and percentage distribution of old age people according to the level of depression. N= 150

Level of depression	Frequency	Percentage
No depression (0-4)	2	1.3
Mild depression (5-10)	38	25.3
Severe depression (11-30)	110	73.4

Table 6 shows that majority (73.4%) of the study subjects are suffering from severe depression

Table 7: Frequency distribution and percentage of old age people based on degree of cognitive impairment. N= 150

Cognitive impairment	Frequency	Percentage
No impairment (24-30)	84	56
Mild impairment (18-23)	57	38
Severe impairment (0-17)	9	6

Table 7 shows that 56 % old age people are not having any cognitive impairment.

Table 8:Correlation between depression and cognitive impairment of old age people.

Variables	Correlation
MMSE GDS	**-0.32****

** Significant at 0.01 level.

Table 8 indicates a statistically significant negative correlation between depression and cognitive impairement.

jobs leading to depression.

As age advances there is possibility for cognitive impairment. Nearly half (49.3 %) of the study subjects belonged to the young old group between 60-70 years. This could be a reason for the finding that 56 % of them had normal cognitive function.

The present study shows a statistically significant negative correlation between depression and cognitive impairment. It could be inferred that when there is normal cognitive status there is less chance for old age depression.

Conclusion

In view of the findings of the present study, it could be concluded that bio-psycho-social intervention model is required to meet the physical problems and depressive symptoms of elderly. Nurses could help in 'capacity building' of other family members to help needy senior citizens

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Self Evaluation Skills of Senior Nursing Students

Continued from Page 20

Table 3: Percentage Distribution of High & Low Scored Statements in 'Intervention' Category	N	%
Do I perform technical skills in an efficient and safe manner?	33	89.2
Do I use therapeutic communication techniques appropriately and effectively?	33	89.2
Is my work organized and finished on time?	24	64.9

have gained in these fields from experience and the rich knowledge base gained in communication. 'Hats off' to the courses which have focused on communication and also to the students for integrating theory into practice. Berman, et al (2008) stated that effective communication among health professionals is vital to the quality of client care.

True to the proverb that 'every coin has two sides' the scores for implementation had declined due to the students' acknowledgement of their mediocre performance to organize and finish work on time (64.9%). These organizational skills are reworded by Chitty (2005) in terms of performing actions, delegating, teaching, counseling, reporting and documenting, while assessing continually. This is a raw area in nursing which requires emphasis and role modeling by clinical teachers / preceptors. Furthermore Berman, A et al (2008) recited that implementation requires cognitive (problem solving, decision making and creativity), interpersonal (the effectiveness of a nursing action often depends largely on the nurse's ability to communicate with others) and technical skills (are purposeful 'hands-on' skills).

The higher scores for evaluative skills were reflected in the student's ability to recognize their patient's response to the interventions provided (94.6%) and in their talent to direct the information obtained for further appraisal to the health team (94.6%). Their ambiguity towards periodical (86.5%) and fair-minded evaluation (67.6%) coupled with inadequate encouragement of patients to evaluate the care provided (86.5%) had narrowed the scores to the 'good' category instead of demonstrating an excellent performance. This signals that nursing students are comfortable in constructing evaluation based on expected consequences but are not able to elicit reliable ones. In fact the framework for evaluation construction is not emphasized greatly when compared to its other components. Chitty (2005) resonated the above opinion as 'evaluation is a critical phase in nursing process, and is often slighted'.

The second objective of the study was to *assess the self evaluation skills of senior nursing students on their personal development & relationship skills.* Even though students felt they were good in this field, a deeper look into the scores obtained for each evaluative statement revealed that, there were wide variations in the judgment made. A congruence in scores (100%) was seen in the student's ability to effectively communicate with the health care team. This is clearly the reflection of the student's self-belief that they can function efficiently as a team player.

This portrayal of confidence had swayed to the opposite pole, in the admission of the fact that their personal values and beliefs interfere in the provision of quality care (43.2%). This attributes to the fact that these students are woven with the threads of their cultural standards and may need to be re-emphasized on cultural diversity so as to confidently face the globalization of the nursing profession. Chitty (2005) described the view of cultural diversity in

Table 4: Percentage Distribution of High & Low Scored Statements in 'Evaluation' Category	N	%
Do I effectively assist in evaluation of the patient's response to medical care and to order to therapies?	35	94.6
Have I evaluated all aspects of care fair-mindedly?	25	67.6

Table 5: Percentage Distribution of High & Low Scored Statements in 'Personal Growth & Relationships' Category	N	%
Do I communicate effectively with others on the health care team?	37	100
Do I have personal values and beliefs that interfere with providing quality nursing care?	16	43.2

recent times as a 'tossed salad' which implies that individuals from other countries are to be increasingly appreciated for the uniqueness and flavor they bring to life in an alien nation.

Conclusion

This study clearly indicates that senior nursing students are capable of evaluating themselves if guided properly. This further emphasizes that when given a tool to evaluate self, students are able to make a self-judgment that, they are not perfect and that there are grey areas in their performance which requires remodeling and strengthening. This moderation is perfected in the analysis of the score obtained for each evaluative statement. These findings hints to us that students have an aptitude for self evaluation and that they are not biased in this endeavor. Best, Carswell and Abbott (1990) voiced their opinion that the variance in self appraisal is directed towards the opportunity given to the students to express opinions about their performances. Therefore nurse educators need not fear that the students will overrate themselves.

With regard to their nursing process skills, it is imperative that the students require systematic guidance in:

- Condensing comprehensive assessment to an organized and utilizable format
- Integrating biologic and social sciences in planning for care
- Constructing achievable expected outcomes
- Understanding that implementing care involves on-going assessments; heath promotive, therapeutic and preventive orders
- Evaluating periodically and considering patient's response to the care provided
- Disintegrating personal values and beliefs in provision of comprehensive care

The classroom culture morphs into a more unified experience when the teacher is not the determining factor in the learning direction and outcome. Blame, judgment and compliance shift to acceptance, responsibility and ownership (McVarish. J., 2009). Applying this form of evaluation in the nursing process will enlighten the nursing students to pick and scrutinize the domains of concern to them. This fosters in them the need to initiate changes in their knowledge base. A learning culture which enhances self – direction sets the stage for unending growth and exploration.

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