BREASTFEEDING SUPPORT:
CLOSE TO MOTHERS

WABA World Breastfeeding Week
1-7 August 2013

www.worldbreastfeedingweek.org

WABA 2013
Metaphor, Nurse’s Vehicle to Carry Caring Mind
An Analysis from Nursing Records

Hattori K *a Higashiyama Yo

a Preparation Office of School of Nursing, Japan University of Health & Environment, Okazaki City, Aichi Pref., Japan.
b Department of Nurse, Nishikobe Medical Center, Koujidai, Nishi-ku, Kobe City, Hyogo Pref., Japan

ABSTRACT
Nursing textbooks advice students to use literal expression expressions, which are considered to be objective. However, we recognize many metaphorical expressions are used by Japanese nurses. We surveyed database of Japanese Nursing Practice Example Accumulation Center (Kawashima, Retrieved 2012/4/14). The database included a large number of texts to explain nurses’ activities.

Concepts developed in cognitive linguistics were used to excavate metaphors, then text mining was applied to sample metaphors systematically. The sampled metaphors were classified by types of source domain. Although it is needless to say that statements about emotions include metaphors, it was found that nurses use many metaphors in statements about facts. Nurses expressions, which include metaphors, are often understated, but the survey of the metaphors revealed that inclusion of the metaphor is expression of caring mind by nurses.

Keywords: Nurse record; Metaphor.

*Corresponding Author
6-2-804 Chagasaki, Ohtsu City, Shiga Pref., Japan ZIP 520-0023
e-mail: hattorik@mx6.mesh.ne.jp

© 2012 International Journal of Nursing
This is an Open Access article distributed under the terms of the Creative Commons Attribution License (http://creativecommons.org/licenses/by/2.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.
Nursing and metaphorical studies:

History of metaphor goes back to Aristoteles who referred to metaphors and their rhetorical effects in Poetics (Matsumoto & Oka, 1997). The rhetoric as one of Seven Liberal Arts was considered to be indispensable for educated person in the Middle Ages in Europe. However, the study of rhetoric went into decline with the advent of Modern Society and was forgotten in modern philosophy or in linguistics for a while. George Lakoff and Mark Johnson (1980), who were taking lead of cognitive linguistics, again shed lights over the metaphor in their work, Metaphors We Live By.

Influence of Lakoff & Johnson’s work was not limited to linguistics. Rather the work provided new aspects in many sciences including nursing research. Frogatt (1998) reported importance of metaphors in emotional works by nurses. Wursbach (1999) analyzed historical change of nursing ethics by reviewing metaphors in nursing activities. Jo & An (2012) surveyed young Koreans regarding death metaphors. Metaphorical study is observed to be important field especially in holistic nursing. Hartrick & Schreiber (1998) said, “Exploring nursing metaphors can provide opportunities to develop new understandings of nursing and to challenge metaphorical images that may be constraining and/or obscuring significant elements of holistic nursing practice.”

It is quite natural to use metaphors for our emotional communications. The metaphor is an effective tool to express our delicate feelings. Lankton & Lankton (1986) demonstrated the metaphorical expressions are effective in family therapy. Metaphors are also effective media to communicate emotions which may include contradictory judgments and to amalgamate conflicting images.

Most of metaphor studies in nursing passed over cognitive side of metaphors although Wursbach (ibid.) cited Black (1955) that metaphors are not merely emotive, but also cognitive. The metaphor studies have possibilities to improve whole nursing science beyond nursing ethics and holistic nursing, but had not been pursued enough

Examples of metaphors in Japanese nursing:

Japanese nurses do not say, “Patient dies.” Rather they say, “Saigo (mortal moment) wo (particle) mukaeru (salute).” “Saigo” means the mortal moment. “wo” is a particle used to indicate part of speech. The Japanese verb: “mukaeru” is usually used in a situation such as saluting a guest coming from a long distance. The Japanese metaphorical expression is literally translated as “Patient’s mortal moment is saluted.”

“Me (eye) wo (particle) hanashite (not contacted) iru (be) ida (while) ni (particle) bakkun (decannulation) ga (particle) okotta (happened).” This example is translated as “While I was looking away from patient, decannulation happened.” “hanasu” is a verb which means increase of distance between two physical objects. Literal meaning of the expression is eye attached at needle is separated from the needle. Surface of needle must be attached with the surface of eye. It is not possible to contact needle, which is at patient’s arm, with eye itself. The needle is an object located at the end of eye line.

A textbook of nursing record (Nin, 2006) introduces appropriate expressions for students to learn. “Family hopes patient would accept cancer treatment.” In Japanese expression, “Kazoku (family) wa (particle) kanja (patient) ga (particle) gan (cancer) no (particle) chiryou (treatment) wo (particle) ukeru (accept) kibou (hope) wo (particle) idaku (hug).” Here, expression “idaku” is translated as hug in English. It is not possible to hug “kibou” which is an abstract entity. By using metaphorical expressions “hug”, nurses’ sincerity to expect recovery is expressed.

Japanese culture and metaphors

Japanese people use many metaphors in daily and cultural contexts. Japanese people express daily scenes by Haiku poetic style. The followings are examples of the old Haiku poem.

English translation of Haiku (Metaphorical Japanese expression)

Ask for water from the neighbour
Morning glory climbing up the well-bucket.

By Chiyoyo Kaga (Lived from 1703 to 1775)

Non-metaphorical expression. Vine of morning glory winds around the rope of well-bucket was not able to cut the vine. So I asked the neighbor for water.
Connotation of Japanese / explanation of metaphor.
The term: “climb” is used for a person. Vegetable does not climb. However, by using the “climb” metaphorically, respect and tenderness to living creature is expressed.

English translation of Haiku (Metaphorical Japanese expression)
What stillness!
The voices of the cicadas
Penetrate the rocks.
By Bashou Matsuo (Lived from 1716 to 1784)

Non-metaphorical expression. The area is very still except the sounds made by cicadas.

Connotation of Japanese / explanation of metaphor.
Sound does not penetrate rocks. But by saying “penetrate”, the stillness of area and voices of the cicadas monopolizing the area are stressed.

Poetic style is observed in history for at least over 1500 years. Modern writers are not exceptions. Haruki Murakami, who is a very popular novelist these days, is known for metaphors. The following is an example from his novel.

Metaphorical Japanese expression (English translation). Spaghettis were very shifty. They, any time soon, glide through brim of pan.
By Haruki Murakami (1949 to present)

Non-metaphorical expression. Spaghetti moves at the brim of pan.

Connotation of Japanese / explanation of metaphor.
Spaghetti, which is a food material, should not be shifty. By “glide through”, active move of the Spaghetti is represented.

Novels, which include large number of metaphorical expressions, are read by Japanese without sense of discomfort. Japanese artistic expressions are often inseparable from the metaphor. For Japanese, it is difficult to recognize their use of metaphor since the metaphorical expressions are so natural. Until the epoch making work by George Lakoff and Mark Johnson (ibid.), people did not recognize metaphors which tied into cognitive processes. So are Japanese.

Methodologies of metaphorical study by cognitive linguistics.
Van den Hoven & Herrlits (1997) advised, “Although some expressions can only be interpreted as metaphors, sometimes words or sentences themselves do not provide sufficient information as to whether they should be interpreted literally or metaphorically.”

Since the metaphors are so natural for Japanese and this study tackles cognitive aspects of metaphors which are buried into our cognitive process itself. Methodologies are needed to mine the metaphorical expressions otherwise most of the metaphors will be passed over. In this study, cognitive linguistics and its frame of analyses(Yamanashi, 2000, 2004; Nabeshima, 2011; Lee, 2011; Kövecses, 2000; Kövecses, 2010) are used to identify the metaphors.

Kinds of metaphor. In nursing metaphor study (Frogatt, ibid.; Wursbach, ibid.; Jo & An, ibid.; Hartrick & Schreiber, ibid.), metaphors are bound in one group. Purpose of these previous researches were to extract and compile metaphors which were related to emotion or psychological activities. These metaphors have simile like characteristics and their identifications are relatively easy. This study uses subdivisions of metaphor: metaphor(narrow sense), metonymy, synecdoche and Simile according to the cognitive linguistics. These subdivisions of the metaphor are used to excavate metaphors concealed in regular expressions.

Metaphor(narrow sense) is a literary figure of speech that describes a subject by asserting that it is, on some point of comparison, the same as another otherwise unrelated object. (Wikipedia, retrieved 2012/06/05)

Metonymy is a figure of speech consisting of the use of the name of one thing for that of another of which it is an attribute or with which it is associated (as “crown” in “lands belonging to the crown”)

Synecdoche is a figure of speech by which a part is put for the whole (as fifty sail for fifty ships), the whole for a part (as society for high society), the species for the genus (as cutthroat for assassin), the genus for the species (as a creature for a man), or the name of the material for the thing made (as boards for stage) (Webster’s Dictionary)

Simile is a figure of speech that directly compares two different things, usually employing the words “like” or “as”. (Wikipedia, retrieved 2012/06/07)
Prototype, Metaphor, and Schema. Structure of metaphoric expression is explained by the next Figure 2. Suppose that there is literal expression: “Information got out.” This expression designates a fact that information got out. This literal expression is pedestrian. Then this literal expression is switched over to metaphorical expression. By switching over to the literal expression into metaphorical expression, narrator becomes to be able to use semantic and pragmatic representational structure of the metaphor.

Prototype is an expression, which has originally nothing to do with the literal expression although some of characteristics of the prototype and literal expression are analogous. To compose a metaphor is to become aware of the analogies between the original literal expression and the prototype, then to apply representational structure of the prototype to the literal expression. Scheme is meta level description of metaphorical expression commonly observed at both prototype and metaphor. (See Fig2. Area of Langacker’s Categorical Triangle.)

In case of the example of Fig. 2, there was relationship between source domain of the prototype: “liquid” and domain of literal expression: “information.” However, the “liquid” and the “information” possess some analogous characteristics. Designation mechanism of prototype was borrowed for the original literal expression and the metaphor was composed. Prototype: “liquid” had convention to relate to verbs: “leak”, “flow”, and “reduce” but the term: “information”, which was used at literal expression, did not have convention to relate to verbs such as “leak”, “flow”, and “reduce”. By applying designation mechanism of the prototype, metaphors are composed and the “information” becomes to be able to relate to: leak”, “flow”, and “reduce”. Thus metaphorical expressions: “Information leaks.”, “Information flows.”, and “information reduces.” are composed.
Source Domain & Target Domain. Source domain provides a reference map of designation mechanism for metaphor. Target domain is a conceptual domain projected according to the map provided by the source domain.

In case of Fig. 2, source domain provides a map to relate predicate verbs: “leak”, “flow”, “reduce” with subject: “liquid”. The target domain, which is projected from the source domain, relates these predicate verbs: “leak”, “flow”, “reduce” with the subject: “information” according to the map provided. (See Fig. 2 Area of Conceptual Domain and Polysemy).

Typically the source domain is composed of more concrete or physical concepts and the target domain is composed of more abstract concepts. Metaphor is a way of understanding abstract situation through tangible and physical experiences (Lee, ibid.). Most of constituent elements of the target domain, which is too abstract or novel to understand, are not preexisting (Wikipedia, retrieved 2012/6/1). The metaphor makes these not preexisting concept to exist and understandable.

A nurse who works between medical doctor and patient, in other words, between a person with medical knowledge and that without medical knowledge, acquired a habit to transfer abstract or not preexisting concepts to concrete or physical concepts. Geraldine W. van Rijn-van Tongeren (1997) indicated, “it is almost impossible not to use metaphors when we talk about abstract concepts.” A nurse, who uses metaphor, translates not preexisting abstract concepts into concrete or physical concepts understandable by patients. Nurse plays “a sturdy bridge between two islands” (Harrick & Schreiber, 1998), more specifically bridge between medical professions and patients.

Polysemy and metaphor. The literal expression is supposed to maintain one to one correspondence between designator and designatum. However, by moving literal expression (Fig. 2. Left side) to metaphorical expression (Fig. 2. right side), range of inference expands. Trajectory of the literal expression is diffused to multiple directions by applying mapping structure of source domain to target domain. Thus metaphor acquires polysemy.

The literal expression, which originally did not have inference system like trajectories of source domain, borrows the inference system and metaphor becomes to be able to use the trajectories of the source domain according to the mapping of the source domain. This is the process of acquisition of polysemy by the metaphor as target domain. Metaphor is given capability to infer multiple meanings.

Introduction of metaphorical expression is a trade-off of polysemy and ambiguity. Metaphor sacrifices strict correspondence between designator and designatum, but by introducing metaphor, trajectories of metaphorical expression diffuses. This diffusion brings polysemy and wealth of expression. However, the polysemy or the wealth is an ambiguity from a different angle.

From strictly medical point of view, ambiguity of expression should be prevented. Yet the strict scientific expression is too abstract or novel for patients. Multiple courses to understand the original scientific expression needs to be prepared for the patients whose socio-cultural backgrounds are various. Easily understandable way of expression needs to be prepared for each patient. Polysemy prepares possibility to respond multiple needs of the different patients.

Nurses feel that something is missing if their representation is limited to literal expression. This is particularly true when the nurses talk about a physiological fact while excluding emotions attached with the physiological fact. By literal expressions, the nurses, who are always imaging patients and their conditions, cannot feel that they say everything they want to say about the patients. The nurses diffuse the trajectory of expressions to satisfy their feeling.

It is not the role of medical profession to communicate scientifically accurate fact to a patient. It is devastating if the profession tells scientifically to a cancer patient, whose life expectancy is one month, that the patient can live only a month. Even if the profession cannot but tell the fact about the life expectancy, he/she will change or moderate the expression so that the patient will accept the fact. Metaphorical expression diffuses the trajectory of expression and increases possibility to absorb various responses. Harrick & Schreiber (ibid.) indicated “Metaphor initiates unconscious processes and serves as a tool for evoking multiple levels of meaning. In this way, metaphors give new meaning and extended understanding about the phenomena.”

Rather than to use a regular expression about the fact: “A patient has surgery”, Japanese nurse uses a metaphorical expression: “A patient salutes surgery.”
The literally expression designates only technical operation, but the metaphorical expression designates not only the technical operation but also possibility of patient’s conflicted feeling to decide surgery, uneasiness of families, pains the patient experienced, etc. “The metaphors and metonymies that serve as cognitive links between two or more distinct senses exist independently in our conceptual system” (Kövecses, 2010).

Conceptual and Perceptual representation.

Medical science might have considered literal expression as desirable and superior and the imagery presentation as inappropriate or inferior. A metaphorical expression, which has multiple meanings or multiple trajectories, tends to be taken away as ambiguous. The metaphorical expression has trajectory to condition with emotional image. Medical expression is ideally conceptual representation and metaphorical expression, which is often used by nurses, approaches perception.

Suppose that there are two representations: “Body temperature is 39 Celsius.” and “Red faced.” The former is conceptual representation and the latter is perceptual representation. These two different representations activate two different activities. Conceptual representation: “Body temperature is 39 Celsius.” may activate prescription of antifebrile. Imagery representation: “Red faced.” may activate an action to bring an ice pack from nurse station. This is a difference in pragmatics rather than in semantics.

It is difficult to think conceptual representation, from which actual sense and living experience is eliminated, as pure symbolic operation. The conceptual representation comes with concrete situation or image indivisibly (Nabeshima, ibid.). Akasofu (ibid.) observes that a symbol represents mental phenomena and a concept represents abstracted content of thought. Metaphor encodes image-concept complex by letters.

If medical representation is the only appropriate expression, nurses should say, “cardiac arrest”. Japanese nurses do not say so. Instead they say, “Patient’s mortal moment is saluted (mukaeru).” The metaphor “salute (mukaeru)” includes respect to the course of life of the patient, sadness of the nurse who could not save the life, and nurses efforts to recover from the shock. By the metaphor, nurses can share the grief with the family.

The nurses integrate ontology and image, also integrate concept and perception by the metaphor. Hartrick & Schreibe (1998) aptly said, “a sturdy bridge between two islands.” A nurse bridges between medical profession and patient by metaphors.

Validity of metaphor extraction

Japanese Nursing Practice Example Accumulation Center (Kawashima, ibid) started to open database of clinical cases through internet. Data were collected from publications on nursing and peer reviewed by a multiple number of expert level nurses. Results were released to internet by common format. Each case includes texted explanation about the case. The database had reliable 577 case records from which total of 9,664 texts were obtained. The text data were randomly permuted many times.

The initial 500 texts out of 9,664 texts were interpreted according to guideline and concepts of cognitive linguistics (Lakoff & Johnson, 1980; Yamanashi, 2000; 2004; Nabeshima, ibid.; Lee, ibid.) as explained in the previous section and typical metaphors were sampled.

Then all the 9,664 records were reviewed by grouping function of text mining software: Text Mining Studio Ver. 4.1 (Mathematical Systems Inc., 2012). The grouping function is a subroutine to collect specific part of text from all the text data according to designated condition while automatically making judgment about flection. Japanese is an agglutinative language and has many conjugations. It is not possible to collect data without the text mining software. Total of 440 kinds of metaphor were sampled.

Extracted metaphors

Derived metaphors were grouped as (1) Metaphor of horizontal migration, (2) Metaphor of vertical migration, (3) Metaphor of qualitative change, (4) Metaphor of distance change, (5) Metaphor of relationship, and (6) Metaphor of visual perception. For each metaphor, English translation, cases applied, Source domain, meaning of source domain, target domain are reported. The meanings of source domain were referred to Japanese dictionaries (Niimura, 2008; Matsumura, 1995a; Matsumura, 1995b; Umesao et.al., 1996).
Table 1. Metaphor of horizontal traveling

<table>
<thead>
<tr>
<th>Metaphor</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;Susumu&quot;</td>
<td>31 kinds</td>
</tr>
<tr>
<td><strong>English Translation</strong></td>
<td>Go forward, come on</td>
</tr>
<tr>
<td>Applied to</td>
<td>ADL; Expansion; comes on; Weaning; Training; Self sustainability of procedure of stomcare; Incarnation; Rehabilitation; Rice gruel meal; Coaching; Ingestion intake; Cure; Treatment; Training of self-management; Transportation by wheelchair; Epithelialization; Food intake; Meal size; Pregnancy course; Self-support of passage; Diet in the hospital; Walking; Ambulation exercise; Radiotherapy; Ambulation.</td>
</tr>
<tr>
<td>Source domain</td>
<td>Horizontal transportation of thing</td>
</tr>
<tr>
<td>Target domain</td>
<td>Improvement of condition</td>
</tr>
<tr>
<td><strong>Source domain</strong></td>
<td>&quot;thing&quot; as physical object.</td>
</tr>
<tr>
<td><strong>Meaning of source domain</strong></td>
<td>Horizontal transportation of thing</td>
</tr>
<tr>
<td><strong>Target domain</strong></td>
<td>Improvement of condition</td>
</tr>
<tr>
<td><strong>Comment</strong></td>
<td>Forward transportation is usually regarded as positive change, but this Kango metaphor means negative change. The expression might be introduced with medical technology and translation settled.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Metaphor</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;Shinkou+ (suru)&quot;</td>
<td>23 kinds</td>
</tr>
<tr>
<td><strong>English Translation</strong></td>
<td>Go forward, come on</td>
</tr>
<tr>
<td>Applied to</td>
<td>Cancer; Brain metastasis; Lung cancer; Pancreas cancer; DIC; disseminated intravascular coagulation; HDS-R point; Cachexia; Altered mentation; Necrosis; Failure of the liver; Loss in muscle strength; Respiratory acidosis; Akness of limbs; Disease; Symptom; Pain of wound; Cognitive symptoms; Atrophy of the brain; Disease; Condition of the disease; Chronic kidney failure; Algia; Decubitus.</td>
</tr>
<tr>
<td>Source domain</td>
<td>Horizontal transportation of thing</td>
</tr>
<tr>
<td>Target domain</td>
<td>Deterioration of condition</td>
</tr>
<tr>
<td><strong>Comment</strong></td>
<td>Forward transportation is usually regarded as positive change, but this Kango metaphor means negative change. The expression might be introduced with medical technology and translation settled.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Metaphor</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;Koutai+ (suru)&quot;</td>
<td>3 kinds</td>
</tr>
<tr>
<td><strong>English Translation</strong></td>
<td>Retreat</td>
</tr>
<tr>
<td>Applied to</td>
<td>ADL; Range of joint motion; Movement of ADL</td>
</tr>
<tr>
<td>Source domain</td>
<td>&quot;thing&quot; as physical object.</td>
</tr>
<tr>
<td>Meaning of source domain</td>
<td>Horizontal transportation of thing toward back with awareness to the front</td>
</tr>
<tr>
<td>Target domain</td>
<td>Deterioration of condition</td>
</tr>
<tr>
<td><strong>Comment</strong></td>
<td>The term was used in only surgical or orthopaedical area.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Metaphor</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;Modoru&quot;</td>
<td>10 kinds</td>
</tr>
<tr>
<td><strong>English Translation</strong></td>
<td>Come back to the starting point</td>
</tr>
<tr>
<td>Applied to</td>
<td>Her smiling face; Method to change frequently; Shining smile; Live alone; Condition of frequent urination; Artificial dialysis; Home care; Cardiac rate; Consciousness; Rice gruel.</td>
</tr>
<tr>
<td>Source domain</td>
<td>&quot;thing&quot; as physical object.</td>
</tr>
<tr>
<td>Meaning of source domain</td>
<td>Horizontal transportation of thing toward front then back, finally comes back to the initial starting point.</td>
</tr>
<tr>
<td>Target domain</td>
<td>Returning to the initial condition</td>
</tr>
</tbody>
</table>
Table 2. Metaphor of vertical traveling

<table>
<thead>
<tr>
<th>Source domain</th>
<th>Meaning of source domain</th>
<th>Target domain</th>
<th>English Translation of metaphor</th>
<th>Applied to</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;Agaru&quot;</td>
<td>Vertical upward transportation of thing.</td>
<td>Improvement of condition</td>
<td>Come up</td>
<td>Effect</td>
<td>Vertical upward transportation of thing.</td>
</tr>
<tr>
<td>&quot;Joushou+(suru)&quot;</td>
<td>Vertical stick out from horizontally spreading surface.</td>
<td>Mean at target domain is salient change observable. The higher the bump becomes, the more nurse involves. Quantitative increase is expressed by metonymy. The increase is determined involuntarily and has nothing to do with patient's effort. Metonymy is used to express physiological index in English such as “Drop in Body Temperature”, “Increase in Rate of Heartbeat” (Koveces, 2000).</td>
<td>Rise</td>
<td>Borg scale(value); CA19-9 (value); CRP (value); HbA1c (value); HR (value); ICP (value); SAT (value); SpO2(value); ST(value); Index; Blood amylase level (value); Brain temperature-ICP (value); Leucocyte(number); HDS-R score; PaCO2 Value; Todai-shiki Observational Rating Scale (value); Blood glucose(value); Pulsebeat.(value).</td>
<td>Source domain is “thing” as physical object.</td>
</tr>
<tr>
<td>&quot;Takamaru&quot;, &quot;Takameru&quot;</td>
<td>Mean at target domain is salient change observable. The higher the bump becomes, the more nurse involves. Quantitative increase is expressed by metonymy. The increase is determined involuntarily and has nothing to do with patient's effort. Metonymy is used to express physiological index in English such as “Drop in Body Temperature”, “Increase in Rate of Heartbeat” (Koveces, 2000).</td>
<td>Jack up, heighten</td>
<td>Source domain is “thing” as physical object.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Comment: Forward transportation is usually regarded as positive change, but this Kango metaphor means negative change. The expression might be introduced with medical technology and translation settled.

| "Koujou+ (saru)" | Increase of height, be flourished | Increase in function, 2. Grow worse | Goes up | Source domain is “functional capability” as attribute | |

Comment: Source domain is “thing” as physical object. Meaning of source domain is vertical stick out from horizontally spreading surface. Meaning at target domain is salient change observable. The higher the bump becomes, the more nurse involves.

| "Koujous+ (saru)" | Increase of height, be flourished, Improve | Increase in function | Goes up | Source domain is “functional capability” as attribute | |

Comment: Increase of height, be flourished, Improve
Table 2. Metaphor of vertical traveling cont.

<table>
<thead>
<tr>
<th>English Translation</th>
<th>Broach</th>
<th>2 kinds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applied to</td>
<td>Task; Discharge planning.</td>
<td></td>
</tr>
<tr>
<td>Source domain</td>
<td>&quot;thing&quot; as physical object.</td>
<td></td>
</tr>
<tr>
<td>Meaning of source domain</td>
<td>The object suddenly appears to the surface by buoyancy.</td>
<td></td>
</tr>
<tr>
<td>Target domain</td>
<td>Meaning at target domain is salient change observable. The higher the bump becomes, the more nurse involves.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>English Translation</th>
<th>Come down</th>
<th>2 kinds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applied to</td>
<td>BP(value); Blood glucose(value).</td>
<td></td>
</tr>
<tr>
<td>Source domain</td>
<td>&quot;thing&quot; as physical object.</td>
<td></td>
</tr>
<tr>
<td>Meaning of source domain</td>
<td>Vertical decrease of height</td>
<td></td>
</tr>
<tr>
<td>Target domain</td>
<td>Metonymy, decrease of numerical value. It is possible that these concepts were imported with medical knowledge then translated into Kango, term with Chinese origin.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>English Translation</th>
<th>Descend</th>
<th>47 kinds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applied to</td>
<td>BP(value); Blood Pressure(value); HR (value); Cardiac index(value); Brain blood flow (quantity); Leucocyte(value); Pulse beat(Frequency); J C S (value); Degree of oxygen saturation(value); PSST (score); SAT (value); SpO₂ (value); TP (value); Albumin(value); Zinc/Copper Intake (value); Maximum emiction pressure (value); Tumor marker(value).</td>
<td></td>
</tr>
<tr>
<td>Parentesis added by author</td>
<td>ADL; Condition of the nutrition; Lower-limb muscle strength; Activity; Hepatic function; Pharyngeal sense; Muscle strength; Retention and recall; Respiratory condition; Left heart function; Retention and recall; Respiratory condition; Oxygen intake function; Stress; Consciousness; Motivation; Faculty of orientation; Consciousness level; Self-purification effect; Self-esteem; Spontaneous breathing; Subjective sense of health; Mani-phalanx muscle; Appetite; function of the kidney(value); Lingual movement; Ciliary motion; Elasticity; Bowel peristalsis. Entire body function; Physical capacity; Capability; Standby capacity.</td>
<td></td>
</tr>
<tr>
<td>Source domain</td>
<td>&quot;thing&quot; as physical object.</td>
<td></td>
</tr>
<tr>
<td>Meaning of source domain</td>
<td>Vertical decrease of height</td>
<td></td>
</tr>
<tr>
<td>Target domain</td>
<td>1. Metonymy, decrease of numerical value. 2. Deterioration of function</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>English Translation</th>
<th>Down</th>
<th>3 kinds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applied to</td>
<td>HbA1c(value); Blood Pressure (value); Blood glucose (value).</td>
<td></td>
</tr>
<tr>
<td>Source domain</td>
<td>&quot;thing&quot; as physical object.</td>
<td></td>
</tr>
<tr>
<td>Meaning of source domain</td>
<td>Object descends its height.</td>
<td></td>
</tr>
<tr>
<td>Target domain</td>
<td>Metonymy used to represent decrease of numerical value. The term is Kango, expressed by Chinese characters.</td>
<td></td>
</tr>
</tbody>
</table>
“Fueru” 21 kinds

<table>
<thead>
<tr>
<th>English Translation</th>
<th>Mount up</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Applied to</strong></td>
<td>Medical procedure (frequency); Nurse call (frequency); House hold work (quantity); Intervention hours (number); Outing (frequency); Sleep out (frequency); Conversation (frequency); Voluntary action (frequency); Question (frequency); Smiles (frequency); Conversation with other patient (frequency); Salivary secretion (quantity); Body weight (value); Important time (number); Involvement with other patient in the same room; Speech (number); Message communication (frequency); Burden share (quantity); Interview (frequency); Sound sleep at night (frequency); Rejection of drug intake (frequency)</td>
</tr>
<tr>
<td><strong>Parenthesis added by author</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Source domain</strong></td>
<td>&quot;thing&quot; as physical object</td>
</tr>
<tr>
<td><strong>Meaning of source domain</strong></td>
<td>Object is piled over another object and whole amount increases.</td>
</tr>
<tr>
<td><strong>Target domain</strong></td>
<td>Metonymy used to present increase.</td>
</tr>
</tbody>
</table>

“Zouka+ (suru)” 16 kinds

<table>
<thead>
<tr>
<th>English Translation</th>
<th>Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Applied to</strong></td>
<td>RR (value); Calorie (number); (A number of) What a patient can do; Snack between meals (frequency); Density of bone (value); Oxygen intake (quantity); Sound sleep (frequency); Salivary secretion (quantity); Body weight (value); bladder emptying (quantity); Pulmonary blood flow (value); Speech (frequency); Mottle at skin (number); Inhibition stress (Quantity); Algia (frequency); phlegm (quantity)</td>
</tr>
<tr>
<td><strong>Parenthesis added by author</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Source domain</strong></td>
<td>&quot;thing&quot; as physical object</td>
</tr>
<tr>
<td><strong>Meaning of source domain</strong></td>
<td>Object is piled over another object and whole amount increases. Kango.</td>
</tr>
<tr>
<td><strong>Target domain</strong></td>
<td>Metonymy used to present increase.</td>
</tr>
</tbody>
</table>

“Kakudai+ (suru)” 15 kinds

<table>
<thead>
<tr>
<th>English Translation</th>
<th>Expand</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Applied to</strong></td>
<td>ADL (value); CTR; Mobility capability; Joint range of motion; Red flare at cavity of mouth; (Range of) transportation; (Amount of) freedom of activity; Independent seated position; Indoor walking (Level); Range of living activities; Range of body motion; (Size of) Red flare; Red flare part; Font (size); Range (of area) of walking</td>
</tr>
<tr>
<td><strong>Parenthesis added by author</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Source domain</strong></td>
<td>&quot;thing&quot; as physical object</td>
</tr>
<tr>
<td><strong>Meaning of source domain</strong></td>
<td>Increase the size of object without changing inter characteristics or structure.</td>
</tr>
<tr>
<td><strong>Target domain</strong></td>
<td>Metonymy, increase value.</td>
</tr>
</tbody>
</table>

“Heru” 10 kinds

<table>
<thead>
<tr>
<th>English Translation</th>
<th>Go down</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Applied to</strong></td>
<td>This persons’ pain (degree); Errors (frequency); Choke (frequency); Coughing &amp; expectoration (quantity); Pleading of pain (frequency); Incontinence (frequency); Pleading (frequency); Nocturnal awakening (frequency); Pleading of anxiety (frequency); Disturbing behavior (frequency); Work load (quantity)</td>
</tr>
<tr>
<td><strong>Parenthesis added by author</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Source domain</strong></td>
<td>Object with quantity</td>
</tr>
<tr>
<td><strong>Meaning of source domain</strong></td>
<td>Decrease the amount of quantity as its top surface goes down.</td>
</tr>
<tr>
<td><strong>Target domain</strong></td>
<td>Decrease of degree.</td>
</tr>
</tbody>
</table>
Table 3. Metaphor of qualitative change cont

<table>
<thead>
<tr>
<th>English Translation</th>
<th>Decrease</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Applied to</strong></td>
<td>T. Bil (density); Nurse call (frequency); Payment of medical bill (number); Waking (hour); Tongue coat (area); Cried children (number); Breathing trouble (frequency); Bacteria (number); Incontinency (frequency); Bleeding (quantity); Choke at meal intake (frequency); Food residual &amp; bleeding of the gum (quantity); Effusion (quantity); Turn out of body (frequency); Energy consumption (quantity); Pleading (frequency); Saliva (quantity); Pressure (value); Body weight (value); Purulent sputum &amp; Yellowish white viscous sputum (quantity); drainage of fluid (quantity); Leukocyte (number); Anxiety (frequency); Turbulent (frequency); Ascites (quantity); salivation (quantity); Complaint of pain (frequency); Pain (number of place)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Source domain</th>
<th>Physical Object which as quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meaning of source domain</td>
<td>Reduces quantity, downward reduction of quantity</td>
</tr>
<tr>
<td>Target domain</td>
<td>Metonymy Means reduction of numeric value</td>
</tr>
</tbody>
</table>

Table 4. Metaphor of distance change

<table>
<thead>
<tr>
<th>English Translation</th>
<th>Come close</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Applied to</strong></td>
<td>Pressure in the capillary 32Hg; Death; Surgical operation; Discharge</td>
</tr>
<tr>
<td>Source domain</td>
<td>Distance between subject and object</td>
</tr>
<tr>
<td>Meaning of source domain</td>
<td>A object, which is located far from the subject, is getting close to the subject. Distance reduction is made by the approaching object. Object is directed toward the subject.</td>
</tr>
<tr>
<td>Target domain</td>
<td>Important event is going to happen with the passage of time.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>English Translation</th>
<th>Come from</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Applied to</strong></td>
<td>Sensation comes from diabetes; edema comes from diabetes; Symptom comes from diabetes; Comes from diabetes; Swelling comes from diabetes; Symptom comes from maladjustment to environmental change; Lowering of consciousness comes from liver; Physical symptom of chronic anxiety comes from uncertainty from now on; Fear comes from experience of failure; Stress comes from threatened premature delivery; Spiritual pain comes from loss of existence value</td>
</tr>
<tr>
<td>Source domain</td>
<td>“thing” as physical object</td>
</tr>
<tr>
<td>Meaning of source domain</td>
<td>Object is moving and coming close to the subject, but the move of the object is not necessarily directed toward the subject.</td>
</tr>
<tr>
<td>Target domain</td>
<td>Express causal relationship.</td>
</tr>
</tbody>
</table>
### “Hanareru”, “Hanasu” 9 kinds

<table>
<thead>
<tr>
<th>English Translation</th>
<th>Get away</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Applied to</strong></td>
<td>One of daughters; Nurse station; Family; Home care; Parents; Home gets away from the clinic; Patient’s room; Eyes; Outsider</td>
</tr>
<tr>
<td><strong>Source domain</strong></td>
<td>Two objects, or subject and object</td>
</tr>
<tr>
<td><strong>Meaning of source domain</strong></td>
<td>Distance between two objects or that between subject and object increases.</td>
</tr>
<tr>
<td><strong>Target domain</strong></td>
<td>There is an increase of psychological distance. Connotation that nurse does not expect increase of distance is observed.</td>
</tr>
</tbody>
</table>

### “Semaru” 2 kinds

<table>
<thead>
<tr>
<th>English Translation</th>
<th>Close on</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Applied to</strong></td>
<td>Terminal period; Time to start training</td>
</tr>
<tr>
<td><strong>Source domain</strong></td>
<td>Two objects, or subject and object</td>
</tr>
<tr>
<td><strong>Meaning of source domain</strong></td>
<td>Distance from the object is getting close and the closeness produces stress or pressure to the subject.</td>
</tr>
<tr>
<td><strong>Target domain</strong></td>
<td>Important event is going to happen.</td>
</tr>
</tbody>
</table>

### “Idaku” 8 kinds

<table>
<thead>
<tr>
<th>English Translation</th>
<th>Hug</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Applied to</strong></td>
<td>Anxiety; Uneasy sense; Spiritual pain; Fear; Feeling; Emotion; Pain; Uneasiness</td>
</tr>
<tr>
<td><strong>Source domain</strong></td>
<td>Object of love, or object which is affectionate enough to hold within arms.</td>
</tr>
<tr>
<td><strong>Meaning of source domain</strong></td>
<td>Hold object within arms as to hug a baby</td>
</tr>
<tr>
<td><strong>Target domain</strong></td>
<td>Emotion held close to a subject.</td>
</tr>
</tbody>
</table>

### “Kakaeru” 6 kinds

<table>
<thead>
<tr>
<th>English Translation</th>
<th>Take in</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Applied to</strong></td>
<td>Impairment; Avoidance behavior and conflict; Problems; Anxiety; Anxiety for brain metastasis; Disability</td>
</tr>
<tr>
<td><strong>Source domain</strong></td>
<td>“thing” or object</td>
</tr>
<tr>
<td><strong>Meaning of source domain</strong></td>
<td>Since object is too heavy to hold by hands. the object is held by hands, arms and part body to resist the weight.</td>
</tr>
<tr>
<td><strong>Target domain</strong></td>
<td>To resist against problem. There is a wish to be get away from the object, but responsibility does not allow the subject to disengage.</td>
</tr>
</tbody>
</table>

### “Torimodosu” 7 kinds

<table>
<thead>
<tr>
<th>English Translation</th>
<th>Take back</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Applied to</strong></td>
<td>Motivation; Willingness; Memory; Time sense; Life; Rhythm of day and night; Cheerfulness; Calmness</td>
</tr>
<tr>
<td><strong>Source domain</strong></td>
<td>“thing” or object</td>
</tr>
<tr>
<td><strong>Meaning of source domain</strong></td>
<td>Once object was possessed by subject, but the object was taken away, then subject takes back the object.</td>
</tr>
<tr>
<td><strong>Target domain</strong></td>
<td>Take back entity or attribute which was once lost.</td>
</tr>
</tbody>
</table>
### “Uketomeru”

<table>
<thead>
<tr>
<th>English Translation</th>
<th>Take out of</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applied to</td>
<td>What patient openhearted; Expression of emotion; Feeling; Desire; Explanation; Contents of explanation; What openhearted</td>
</tr>
<tr>
<td></td>
<td>Reality as it is; As they are; Only thing to do is to wait; be given up by one’s doctor; It; Patient’s death; Process to die; Surgical operation; Happenings; Disability; Situation; Change of condition; Symptom</td>
</tr>
<tr>
<td></td>
<td>Pain; Restlessness and sorrow; Anxiety; Rage</td>
</tr>
</tbody>
</table>

**Source domain**

“thing” or physical object

**Meaning of source domain**

Catch and stop physical object coming toward subject with acceleration.

**Target domain**

Listen to emotional words, accept feeling of client, hear attentively.

### “Motsu”

<table>
<thead>
<tr>
<th>English Translation</th>
<th>Hold by hand</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applied to</td>
<td>Image; Conference; Wish to be cared; Communication; Elbow room; Security feeling; Notions; Conscious mind; Motivation; Impression; Time to spend with patient; Involvement; Interest; Hope; Anamnestic case; Expectation; Opportunity; Time to listen to feeling; Question; Interest; Plan; Regretfulness; Contacts; Confidence; Disability; Concern; Strong character; Eagerness to live; Sense of urgency; Chance to see; Physical capacity; Resistance; History of diabetes; Red flare by reactive hyperemia; Anxiety; Discomfort feeling; Complaint; Chance to talk with husband; Goal; Desire; Dialogue</td>
</tr>
<tr>
<td>Source domain</td>
<td>“thing” or physical object</td>
</tr>
<tr>
<td>Meaning of source domain</td>
<td>To hold on object by hand which has weight.</td>
</tr>
<tr>
<td>Target domain</td>
<td>Possess. Contact level is smaller than idaku.</td>
</tr>
</tbody>
</table>

### “Fureru”

<table>
<thead>
<tr>
<th>English Translation</th>
<th>Touch</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applied to</td>
<td>Topic about photo and music; Patient’s eyes</td>
</tr>
<tr>
<td>Source domain</td>
<td>“thing” or physical object</td>
</tr>
<tr>
<td>Meaning of source domain</td>
<td>Touch object slightly.</td>
</tr>
<tr>
<td>Target domain</td>
<td>Involves carefully so that the involvement does not influence characteristics of the object.</td>
</tr>
</tbody>
</table>

### Houchi + (suru)”

<table>
<thead>
<tr>
<th>English Translation</th>
<th>Touch</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applied to</td>
<td>Diabetes; High-blood pressure, Sugar urine; Adhesion of blood; Dry mouth; Polypsia; Excessive urination; Trachyphonia; High level of sugar</td>
</tr>
<tr>
<td>Source domain</td>
<td>“thing” as physical object</td>
</tr>
<tr>
<td>Meaning of source domain</td>
<td>Leave a thing without touching.</td>
</tr>
<tr>
<td>Target domain</td>
<td>Does not intervene the advances of entity or attribute.</td>
</tr>
</tbody>
</table>
### Table 5. Metaphor of relationship cont.

#### “Tamotsu”

<table>
<thead>
<tr>
<th>English Translation</th>
<th>Preserve</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applied to</td>
<td>SaO₂; Bed rest; Memory; Blood glucose level; Contacts with other patients; Cleanliness of mouth cavity; Width; Body hygiene; Hygiene; Condition of life; decubitus position; Seated position at the edge of bed; healthy skin</td>
</tr>
<tr>
<td>Source domain</td>
<td>“thing” as physical object.</td>
</tr>
<tr>
<td>Meaning of source domain</td>
<td>Maintain the object without change.</td>
</tr>
<tr>
<td>Target domain</td>
<td>Preserve the condition, attribute, characteristics, and entity.</td>
</tr>
</tbody>
</table>

#### “Ninau”

<table>
<thead>
<tr>
<th>English Translation</th>
<th>Bear</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applied to</td>
<td>Nursing Care; Coordinating role between patient and other family members; Domestic works</td>
</tr>
<tr>
<td>Source domain</td>
<td>“thing” as physical object.</td>
</tr>
<tr>
<td>Meaning of source domain</td>
<td>To bear object, which is often heavy, for the sake of others.</td>
</tr>
<tr>
<td>Target domain</td>
<td>To reduce load of other person and carry the load instead.</td>
</tr>
</tbody>
</table>

#### “Katameru”, “Katamaru”

<table>
<thead>
<tr>
<th>English Translation</th>
<th>Jell, get hard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applied to</td>
<td>Animus; Decision</td>
</tr>
<tr>
<td>Source domain</td>
<td>“thing” as physical object.</td>
</tr>
<tr>
<td>Meaning of source domain</td>
<td>To harden object or object naturally hardens</td>
</tr>
<tr>
<td>Target domain</td>
<td>To make one’s existence immobile</td>
</tr>
</tbody>
</table>

#### “Mukaeru”

<table>
<thead>
<tr>
<th>English Translation</th>
<th>Jell, get hard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applied to</td>
<td>Death; Terminal moment; Day of discharge; Operation; First period; Terminal period</td>
</tr>
<tr>
<td>Source domain</td>
<td>Person</td>
</tr>
<tr>
<td>Meaning of source domain</td>
<td>Act to greet important person or guest at house gate.</td>
</tr>
<tr>
<td>Target domain</td>
<td>Correspond situation which is important with respect.</td>
</tr>
</tbody>
</table>
Table 6. Metaphor of visual perception

**“Mieru”**

<table>
<thead>
<tr>
<th>English Translation</th>
<th>Come out, visible</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Applied to</strong></td>
<td>Motivation; Direction; Task; Augury of rehabilitation; Context of home care; Attitude to save money</td>
</tr>
<tr>
<td><strong>Source domain</strong></td>
<td>“thing” as physical object.</td>
</tr>
<tr>
<td><strong>Meaning of source domain</strong></td>
<td>Object is visually identifiable.</td>
</tr>
<tr>
<td><strong>Target domain</strong></td>
<td>To identify or to judge substance which is not visible</td>
</tr>
</tbody>
</table>

**“Arawareru”**

<table>
<thead>
<tr>
<th>English Translation</th>
<th>Appear, Things, which could not be seen, becomes available to see</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Applied to</strong></td>
<td>Pain appears. Effect appears. Physical symptom appears. Trouble in walking appears.</td>
</tr>
<tr>
<td><strong>Source domain</strong></td>
<td>visually identifiable “thing”</td>
</tr>
<tr>
<td><strong>Meaning of source domain</strong></td>
<td>thing becomes identifiable visually</td>
</tr>
<tr>
<td><strong>Target domain</strong></td>
<td>Object, which was not overt object, becomes overt.</td>
</tr>
</tbody>
</table>

**“Furikaeru”**

<table>
<thead>
<tr>
<th>English Translation</th>
<th>Look back</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Applied to</strong></td>
<td>Past way of being; Diet behavior; Nurse; Path; Own attitude to receive care; Own course of life; Meal contents; Events in life; Life style; Own attitude toward son; Daily physical condition; Diet habit before admission to hospital</td>
</tr>
<tr>
<td><strong>Source domain</strong></td>
<td>“human body”</td>
</tr>
<tr>
<td><strong>Meaning of source domain</strong></td>
<td>Twist body toward back so that a person will be able to see the back.</td>
</tr>
<tr>
<td><strong>Target domain</strong></td>
<td>To evaluate the past events or behavior, or to hark back</td>
</tr>
</tbody>
</table>

---

**Fig 3. Types of Japanese words**

- **Kango**: words originated from ancient Chinese expression or words produced by Chinese characters according to ancient Chinese grammar
- **Loan words**: imported from Western countries often with modern science
- **Wago**: Unique Japanese words other than _Kango_ and loan words

---

International Journal of Nursing 2(2), 2013
Three types of Japanese term: Wago, Kango, and Loan word

Three types of Japanese terms, which have different origins, were observed by data sampling (Fig. 3).

1) **Wago**

Wago is a unique Japanese word which has a root in ancient Japanese culture. Words other than Kango and Loan words are classified as Wago. Japanese people tend to express their emotion by the Wago. Connections were observed especially between metaphors and Wago.

2) **Kango**

Kango is a word originated from ancient Chinese term or word produced by Chinese characters according to ancient Chinese grammar. Scientific terms are often expressed by combination of Chinese characters. This is a historical tradition that elites learned and used Chinese expressions for official situations.

3) **Loan word**

Loan word, which is usually expressed by phonetic sign called Kana, is imported word from Western countries with modern science.

Characteristics of metaphor by Japanese nurses

**Metaphor and Wago.** This survey revealed strong relationship between metaphor (narrow sense) and Wago. Wago’s such as “Susumu”: come on; “Modoru”: come back; “Agaru”: come up; “Takamaru”: rise; “Takameru”: up; “Sagaru”: come down; “Fueru”: mount up; “Heru”: go down; “Kuru”: come; “Hanareru”: get away; “Hanasu”: set apart; “Semaru”: close on; “Idaku”: hug; “Kakaeru”: take in; “Torimodosu”: take back; “Uketomeru”: take out of; “Motsu”: have; “Fureru”: touch; “Tamotsu”: preserve; “Ninai”: bear; “Katameru”: jell; “Katamaru”: get hard; “Mukaeru”: salute; “Mieru”: Comeout; “Ararureru”: appear; “Furikaeru”: look back were all **metaphors** (narrow sense).

Metaphors by **Wago** reflect nurse’s emotion. “Kaifuku(recovery, noun) no(particle) kibou(hope, noun) wo(particle) idaku(hug, verb) .” (Hug hope of recovery) Nurse “hugs” hope of recovery as if she hugs a beloved baby. If patient dies, a nurse says “Saigo (mortal moment, noun) wo(particle) mukaeru(salute, verb)”, “Mukaeru(salute)” is the very best expression for the respect of the course of life of the patient, who was defeated by disease, by nurse as fellow soldier. This is an expression to reward the nurse for her service.

**Metonymy and Kango**

Kango’s such as “Shinkou+ (suru)”: Advance; “Koutai+ (suru)”: Regress; “Joushou+(suru)”: rise; “Koujou+(suru)”: goes up; “Teikai+ (suru)”: Descend; “Kakou+ (suru)”: Down; “Zouka+(suru)”: Increase; “Kakudai+(suru)”: expand; “Genshou+(suru)”: Decrease; “Shukushou+(suru)”: Reduce; “Houchi+ (suru)”: Neglect were used to as metonymies to express physiological condition.

These Kango’s are considered to be translation of foreign words came with medical knowledge. Traditionally academic words are written by Chinese characters and their parts of speech are noun. Action is expressed by verbal phrase which is composed of noun stem and verbal suffix (“suru”) added after the noun. Although “Fujou+ (suru)”: levitate was Kango, it was an exception used as metaphor. A few metonymies were observed but they were originally Wago.

**Japanese oral culture and Wago.** There were immigrants from China and Korea in 4th to 7th Centuries when Japan was in oral culture. They brought culture including Chinese characters as writing system with them. Stating of Chinese character as phonogram of Japanese language is estimated from Nara era which is from A.D. 775 (Watanabe,1997). Terms, which have roots in the oral culture before the Nara era, are considered as Wago.

Appendix I summarizes Wago and their oldest appearance in historic records including anthology and stories. These records are known for exquisite psychological descriptions of characters, portrayal recognition of scenes, and emotional exchange. Import of Chinese characters as writing system stimulated recording of the oral stories by letters. It is appropriate to think that the most of the records are from folklores as oral stories. To use Wago means to use more than thousand years old semantics and pragmatics which represent subconsciousness of Japanese people.

Sensuous difference of Wago and Kango is indicated (Sanseidou, retrieved 2012/4/22). The Wago has polysemy which extends to behavior and emotion. The Kango, which reduces influences of emotion, is useful for literal expression. Unlike the Kango, Wago is effective to express interpersonal relations and psychological conflict between nurse and patient. It is quite natural that nurses use Wago to bridge between medicine as technology and patient as human, and metaphor, which is composed of Wago, to defuse trajectory of expression in order to communicate with various inner voices of patients.
Mirror neuron and meaning of word

“The brain is made up of neurons. In the neural theory of language, neural groups are modeled as “nodes.” Each neuron can function in different neural groups” (Kövecses, 2000). Among these neural groups, special neurons located at Inferior Frontal Cortex and Inferior Parietal Cortex were found by a team of Giacomo Rizzolatti, Giuseppe Di Pellegrino, Luciano Fadiga, Leonardo Fogassi, and Vittorio Gallese (Iacoboni, 2008).

“The same mirror neurons fire when we perform an action and when we see someone else performing that action. Moreover, they are also active when we imagine that we perform or perceive the same action” (Kövecses, ibid.). See Fig. 4. “Meaning is mental simulation. What this means is that we activate those neurons that are needed to perform or imagine an action. A node is meaningful when its activation results in the activation of the whole neural simulation. We get inferences when activation of a meaningful node results in the activation of another meaningful node” (Kövecses, 2010). Gallese, et.al. (1996) discussed that the mirror neuron system has a role in action recognition and proposed that monkey’s ventral premotor cortex is homologous to the human Broca’s region. Mirror neuron has relationship with language.

Jabbi, Swarta, & Keysers (2007) provided support that mirror system is linked to empathy. If this is true, activation of emotion by metaphor has evidence in brain. Nurses are playing important human work to act upon empathy of patients by using metaphor. There is no reason to take away metaphors from nurses.

A nurse tends to use or prefers to use metaphors while sacrificing semantic strictness, in other words, one-to-one relationship between designator and designatum. There is a mood not to accept metaphorical expression by nurses for polysemy and ambiguity. Rather it is understood that the nurses are playing important role by the metaphor. Nurse’s metaphor has more effect over patient’ emotion.

Discussion

Hyperperistals of intestines is often expressed by onomatopoeia “goro-goro” in Japanese. This onomatopoeia is used to represent both a rock rolling over and peal of thunder. There is an analogy between the rock rolling over and internal perception of move of intestinal gas. There is also an analogy between peal of thunder and sound of intestinal gas. A patient may say, “I feel goro-goro at stomach area.” If a nurse replies, “Your intestines have hyperperistalsis”, the patient will feel he/she would be left in a patient room without care. The patient does not want medical diagnosis, but empathy to discomfort at stomach area.

It may not be only a trend in Japan but also in the United States that nurses’ expression is understated. The nurses’ expression is viewed as “complexity and ambiguity within nurses’ conceptualization” (Hartrick & Schreiber, 1998). The complexity and ambiguity of nurses expression have significance. If only literal expression, from which trajectories to emotions and activities are excluded, is used by nurses, ward will become like dessert. The metaphor used by nurses is a vehicle to transport nurses’ wish to care patient and family. Announcement, which is expressed by metaphor by nurse, is not a pronouncement of misery.

For holistic nursing, metaphor is one of major areas of study. The metaphor in nursing had been studied in relation to emotional activities. However, this report revealed that use of metaphorical expressions is not limited to holistic nursing. Rather the metaphors are buried at all over the nursing records. Phil Barker (2001) is critical about health care which became increasingly technical and emotionally distant, and bureaucratic.
As long as we observe nursing records, we can say it is a needless fear that nurses are getting distant emotionally. Caring attitudes are buried in nurses’ metaphorical expressions. Even at a situation when very objective attitude is demanded, nurses insert secret message that they hope recovery of patients. The metaphors by nurses are vehicles to carry message of the hope and caring.

We can share the concerns by Phil Barker (ibid.). Due to excessive insistence over physiological expression to young students, transmission of language conventions, which veteran Japanese nurses developed through 100 years of accumulation of experiences, from veteran generation to younger generation is coming to be difficult. Younger generation, who were reinforced by multiple choice decisions through 12 years of elementary and secondary level education, is not well in making instinctive or fuzzy decision based on accumulation of experiences.

So called qualitative method in nursing is often an escape from advances of modern technology. Certainly it is difficult to represent instinctive or holistic facts by traditional qualitative methods. Nurses’ instinctive or fuzzy decision cannot be proven by significance tests. Nurses may go to extremes from the denial of significance tests to qualitative methods. Financial and scientific sides of medicine and nursing cannot be denied. If we deny these sides, we will lose places to speak in medical facilities where there are many stakeholders including insurance agencies and other business organizations. Qualitative methods including phenomenology and other philosophical methods are very useful for model construct or paradigm building. However, evidence based or empirical methods should be deducted from the construct. Otherwise, the public would turn a deaf ear.

Data, which come out from nurses’ activity, do not distribute normally. Scales, which nurses use, are often instinctive and distances between divisions of the scales are not even. Problems of significance tests had been criticized already in 1971 by Denton E. Morrison & Ramon E. Henkel’s epoch making Significance Test Controversy (2006). Statisticians already shifted from the significance test concept to quantity of information concept such as Akaike’s Information Criteria (AIC) (Sakamoto, et.al., 1983).

They had developed many techniques to represent fuzzy or non-normal distributions. Neural network, support vector machine, fuzzy clustering, etc. This research is a by-product of artificial intelligence research in nursing. We propose readers to turn their eyes to new trends in science. It is difficult to expresses objects which makes delicate changes and is almost impossible to represent 100% well, but efforts must be made to represent the delicate objects in order to survive in a society which is composed of multiple stakeholders.

Acknowledgement

Many suggestions were given from discussions at Kyoto Linguistics Colloquium (http://www.hi.h.kyoto-u.ac.jp/modules/KLC/index.php?content_id=1). Mr. Keita Komatsubara and Mr. Kaoru Itoh, doctoral candidates of Kyoto University checked metaphors from the point of cognitive linguistics. This research is a by-product of development of nursing ontology, CHARM Convincing Human Action Rationalized Model (Sasajima, M., et.al, 2011; Nishimura, S., et.al., 2011; Nishimura, S. et.al., 2012; Sasajima, M., et.al., 2012) carried out collaboratively with Riichiro Mizoguchi’s Laboratory, Institute of Scientific & Industrial Research, Osaka University. Project needed to translate surface vocabulary, which explain behavior of artificial intelligence, into functional vocabulary of ontology. Data were sampled from database of Japanese Nursing Practice Example Accumulation Center Database, (http://www.kangojirei.jp/index.html). Authors appreciate above people who involved in the above mentioned projects.
## Appendix  Wago’s used as metaphor and their Oldest Appearance in Historic Records

<table>
<thead>
<tr>
<th>Term</th>
<th>English</th>
<th>Source</th>
<th>Century</th>
</tr>
</thead>
<tbody>
<tr>
<td>“susumu”</td>
<td>come on</td>
<td>Man’youshuu Anthology&lt;sup&gt;(1)&lt;/sup&gt;</td>
<td>7&lt;sup&gt;th&lt;/sup&gt;</td>
</tr>
<tr>
<td>“modoru”</td>
<td>come back</td>
<td>Nihonshoki&lt;sup&gt;(2)&lt;/sup&gt;</td>
<td>8&lt;sup&gt;th&lt;/sup&gt;</td>
</tr>
<tr>
<td>“agaru”</td>
<td>come up</td>
<td>Man’youshuu Anthology</td>
<td>7&lt;sup&gt;th&lt;/sup&gt;</td>
</tr>
<tr>
<td>“takamaru”</td>
<td>rise</td>
<td>Man’youshuu Anthology</td>
<td>7&lt;sup&gt;th&lt;/sup&gt;</td>
</tr>
<tr>
<td>“takameru”</td>
<td>up</td>
<td>Man’youshuu Anthology</td>
<td>7&lt;sup&gt;th&lt;/sup&gt;</td>
</tr>
<tr>
<td>“sagaru”</td>
<td>come down</td>
<td>Man’youshuu Anthology</td>
<td>7&lt;sup&gt;th&lt;/sup&gt;</td>
</tr>
<tr>
<td>“fueru(fuyuru)”*</td>
<td>mount up</td>
<td>Bunmei Honsetsu Youshuu&lt;sup&gt;(3)&lt;/sup&gt;</td>
<td>15&lt;sup&gt;th&lt;/sup&gt;</td>
</tr>
<tr>
<td>“heru”</td>
<td>go down</td>
<td>Genpeishousuiki&lt;sup&gt;(4)&lt;/sup&gt;</td>
<td>12&lt;sup&gt;th&lt;/sup&gt;</td>
</tr>
<tr>
<td>“kuru”</td>
<td>come</td>
<td>Man’youshuu Anthology</td>
<td>7&lt;sup&gt;th&lt;/sup&gt;</td>
</tr>
<tr>
<td>“hanareru”</td>
<td>get away</td>
<td>Man’youshuu Anthology</td>
<td>7&lt;sup&gt;th&lt;/sup&gt;</td>
</tr>
<tr>
<td>“hanasu”</td>
<td>set apart</td>
<td>Man’youshuu Anthology</td>
<td>7&lt;sup&gt;th&lt;/sup&gt;</td>
</tr>
<tr>
<td>“semaru”</td>
<td>close on</td>
<td>Hokekyou Gensan&lt;sup&gt;(5)&lt;/sup&gt;</td>
<td>10&lt;sup&gt;th&lt;/sup&gt;</td>
</tr>
<tr>
<td>“idaku”</td>
<td>hug</td>
<td>Ryouiki&lt;sup&gt;(6)&lt;/sup&gt;</td>
<td>9&lt;sup&gt;th&lt;/sup&gt;</td>
</tr>
<tr>
<td>“kakaeru”</td>
<td>take in</td>
<td>Taketori Story Oral history&lt;sup&gt;(7)&lt;/sup&gt;</td>
<td>9&lt;sup&gt;th&lt;/sup&gt;</td>
</tr>
<tr>
<td>“torimodosu”</td>
<td>take back</td>
<td>Hokekyou Gensan</td>
<td>10&lt;sup&gt;th&lt;/sup&gt;</td>
</tr>
<tr>
<td>“uketomeru”</td>
<td>take out of</td>
<td>Man’youshuu Anthology</td>
<td>7&lt;sup&gt;th&lt;/sup&gt;</td>
</tr>
<tr>
<td>“motsu”</td>
<td>have</td>
<td>Man’youshuu Anthology</td>
<td>7&lt;sup&gt;th&lt;/sup&gt;</td>
</tr>
<tr>
<td>“fureru”</td>
<td>touch</td>
<td>Man’youshuu Anthology</td>
<td>7&lt;sup&gt;th&lt;/sup&gt;</td>
</tr>
<tr>
<td>“tamotsu”</td>
<td>preserve</td>
<td>Genji Story&lt;sup&gt;(8)&lt;/sup&gt;</td>
<td>11&lt;sup&gt;th&lt;/sup&gt;</td>
</tr>
<tr>
<td>“ninau”</td>
<td>bear</td>
<td>Man’youshuu Anthology</td>
<td>7&lt;sup&gt;th&lt;/sup&gt;</td>
</tr>
<tr>
<td>“katameru”</td>
<td>jell</td>
<td>Man’youshuu Anthology</td>
<td>7&lt;sup&gt;th&lt;/sup&gt;</td>
</tr>
<tr>
<td>“katamaru”</td>
<td>get hard</td>
<td>Kokinwakashu Anthology&lt;sup&gt;(9)&lt;/sup&gt;</td>
<td>10&lt;sup&gt;th&lt;/sup&gt;</td>
</tr>
<tr>
<td>“mukaeru”</td>
<td>salute</td>
<td>Man’youshuu Anthology</td>
<td>7&lt;sup&gt;th&lt;/sup&gt;</td>
</tr>
<tr>
<td>“mieru”</td>
<td>come out</td>
<td>Man’youshuu Anthology</td>
<td>7&lt;sup&gt;th&lt;/sup&gt;</td>
</tr>
<tr>
<td>“arawareru”</td>
<td>appear</td>
<td>Genji Story</td>
<td>11&lt;sup&gt;th&lt;/sup&gt;</td>
</tr>
<tr>
<td>“furikaeru”</td>
<td>look back</td>
<td>Man’youshuu Anthology</td>
<td>7&lt;sup&gt;th&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

*old pronunciation is “fuyuru”

1. Man’youshuu Anthology: Anthology collected from mid 7<sup>th</sup> Century to early 8<sup>th</sup> Century.
6. Ryouiki is narrative literature. Collection of ghost or bizarre folkelores.
7. Taketori Story: Story written in 890’s from oral story according to a popular theory.
8. Genji Story: The first long story about lives of noble people during the Heian era in Japan.
9. Kokinwakashu Anthology: Anthology edited by order of Emperor Daigo by picking up old poems which were not compiled in the Man’youshuu Anthology.
Reference


Iacoboni, Marco (2009) Mirroring People the Science of Empathy and How We Connect With Others, Picador USA

Itoh, Kaoru (2012) Personal communication, Author (Text in Japanese)


Mathematical Systems Inc. (2012) Text Mining Studio Ver.4.1, Author (Text in Japanese)


Background: Upper gastrointestinal bleed is the serious medical condition which needs immediate interventions to prevent patients from serious complications. Nurses and physicians neglect gastrointestinal bleed pathway documentation which results in improper patient care management. **Aim of the study:** The aim of this paper is to overview the reviews on gastrointestinal bleed pathway documentation and also to identify the barriers of gastrointestinal bleed pathway documentation among physicians and nurses.

**Methods:** Literature search was undertaken in a systematic way to explore and review the existing literature related to documentation in GI bleed pathway and the barriers of documentation among nurses and physicians. For literature search, four major databases, CINHAL plus with full text, PUBMED, Cochrane library and JSTOR were used. Other search engine like Google scholar was also used to find the relevant literature. These databases were searched for the time period between 2000 and 2012.

**Results:** The literature review reveals studies on effectiveness of gastrointestinal bleed pathway on patient’s outcome, effect of clinical pathway on documentation, and barriers of documentation in clinical pathway. However, globally, none of the study focused specifically on gastrointestinal bleed pathway documentation among physicians and nurses.

**Conclusion:** There is a gap in literature regarding physicians and nurses’ practice towards documentation of gastrointestinal bleed pathway. It is recommended that base line study is needed in this area to overcome the issue of managing gastrointestinal bleed patients and to improve patients’ quality of care.

**Keywords:** Gastrointestinal bleed; Clinical pathway; Documentation; Nurses; Physicians.

*Corresponding Author
D-14, Pak Tameer Plaza, block 14, Gulshan-e-Iqbal, Karachi, Pakistan. e-mail: shahina.sabzali@gmail.com

© 2012 International Journal of Nursing
This is an Open Access article distributed under the terms of the Creative Commons Attribution License (http://creativecommons.org/licenses/by/2.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.
**Introduction:**

While working in the medicine unit of one of the tertiary care hospitals of Pakistan, it was observed that various patients were admitted under the care of gastroenterology, oncology, or neurology services. In gastroenterology services, there were patients with Upper gastrointestinal (UGI) bleed, hepatitis, appendicitis, cholecystitis, and many others related to gastrointestinal (GI) problems. Among them, UGI bleed is the serious medical condition which needs immediate interventions to prevent patients from serious complications. It was observed that the number of UGI bleed patients has increased gradually which required more time from nurses and physicians for thorough assessment, counseling, diagnostic procedures, and education. Therefore, it was noted that nurses and physicians were unable to do proper documentation which resulted in improper patient care management. That is the reason nurses and physicians need to be re-assessed for their documentation skills for managing these patients.

The aim of clinical pathway is to implement evidence-based practice, reduce duplication through standard tool and reduce variation in health care services. GI bleed pathway is followed for the patients with UGI bleed to provide immediate care with specific guidelines and protocols. Various issues have been observed regarding documentation of GI bleed pathway among nurses and physicians. It was noted that physicians and nurses were non-compliance with pathway documentation. The pathways were found to be incomplete or several sections were underused. In few instances, pathway was not signed and dated by nurses and physicians.

The documentation enables effective communication between nurses and other health care providers about the patients’ condition and the interventions that were carried out, and also the patients’ response to those interventions. Documentation is not separate from care and it is not optional; however, it is an integral part of practice and it is an important tool that is used to ensure high-quality care. Documentation is also a risk management for the patient receiving care, for the staff providing the care, and for the organization. Most importantly, the purpose of introducing clinical pathway in the health care setting was to facilitate communication among multidisciplinary team and to provide organized, coordinated, cost effective, and quality care to the patients; however, without proper documentation it cannot be achieved. Therefore, there is an immediate need to work on documentation of GI bleed pathway.

**Aim of the study**

The aim of this paper is to overview the reviews on GI bleed pathway documentation and to identify the barriers of documentation of GI bleed pathway among physicians and nurses.

**Methodology:**

Literature search was undertaken in a systematic way to explore and review the existing literature related to documentation in GI bleed pathway and the barriers of documentation among nurses and physicians. For literature search, four major databases, CINHAL plus with full text, PUBMED, Cochrane library and JSTOR were used. Other search engines like Google scholar was also used to find the relevant literature. These databases were searched for the time period between 2000 and 2012. Different key words or combination of key words like GI bleed, clinical pathway, nurses and physician documentation, barriers, attitude and influencing factors were used for all the search engines. A different synonym of clinical pathway like critical pathway, and integrated care pathway was also used to find relevant literature. These key words have been searched by appearing in abstracts, titles, headings, editorials and review articles of all databases. A separate search was carried out for identifying the available literature in Pakistan. For this purpose the term Pakistan was added along with other key words. In addition, ‘ancestry approach’ was also used to search for the relevant literature, in which the reference lists of retrieved articles were checked for other relevant references.

**Findings:**

The literature review is divided into four sections. The first section will present the prevalence of UGI bleed and overview of clinical pathway. The second section will discuss the studies related to the effect of clinical pathway on documentation. The final section will describe the studies related to barriers of documentation in clinical pathway by physician and nurses.
Upper Gastrointestinal bleed and Clinical Pathway

GI bleed is one of the major life threatening emergencies which remain a common cause of hospitalization (Cerulli, 2011). UGI bleed is defined as bleeding derived from proximal to the ligament of Treitz. The incidence of UGI bleed is approximately 100 cases per 100,000 population (Cerulli, 2011) in developed countries whereas the incidence of UGI bleed in developing countries including Pakistan is not known but it is expected to be comparable with global statistics (Mumtaz et al., 2011). Mortality rates from UGIB are 6-10% overall. Therefore, it is highly important that patients with GI bleed should be managed properly to decrease morbidity and mortality.

Clinical pathway is also known as care pathway, critical pathways or integrated care pathways. Globally, these terms are used interchangeably. The Pathway was originated from industrial processes and then introduced in health care system in the early 1980s in the USA (Vanhaecht, Panella, Zelm, & Sermeus, 2010.) It has been widely used in USA, UK, Australia and other developed countries; however, its use in developing countries including Asia has been sporadic (Cheah, 2000) which might have hindered the patient quality of care. Clinical pathways have been proposed for those diseases which require frequent hospitalization and are expensive to treat and have high variation in diagnosis and treatment (Mumtaz et al., 2011); hence, to provide cost effective care to the patients. The upper GI bleed meets all these criteria and qualified for the need of pathway.

Different theoretical literature have emphasized on importance of pathway. According to Cheah (2000), pathway is used to plan, coordinate, deliver, monitor, and document the care concurrently whereas Claridge, Parker, & Cook, (2005) emphasized that “integrated care pathways are documents that integrate both the medical and nursing notes, and are structured around current evidence-based standards, national guidelines and local best practice” (p. 58).

Globally, very few studies have been conducted to evaluate the effectiveness of GI bleed pathway on patient’s outcome which revealed inconsistent findings. A comparative study was conducted in Pakistan among patients whom pathway was followed and whom pathway was not followed. The findings of this study revealed that there was an improvement in time to UGI endoscopy, but it did not reduce the patient’s length of stay (Mumtaz, 2011); however, effectiveness was not measured in terms of documentation. A Study by Podila et al., (2001) in USA reported that GI bleed pathway decreased patient’s length of stay without increasing number of adverse outcomes. Another study from USA found that GI bleed pathway decreased the patient’s hospital cost; however, it did not impact on patient’s length of stay and time to endoscopy (Pfau et al., 2004).

Effect of Clinical Pathway on documentation

Literature emphasized that clinical pathway implementation could be challenging. If not handled well, it may create obstacles. Factors which are crucial for implementation of pathway are to educate all staff members who would be involved in any component of the pathway. Any misconception regarding pathway should be addressed properly. Another important factor is to define the roles for taking responsibility of pathway: Will there be a case manager? Who will make sure that pathways are followed properly by the staff and who will be monitoring the pathway variances? This is an important aspect to achieve the goals and improve outcomes (Every, Hochman, Becker Kopecky & Cannon, 2000).

Interestingly different studies across the world (Every et al., 2000; Pace, Sakulkoo, Hoffart, & Cobb, 2002) have found that the documentation burden has decreased because of introducing pathway in healthcare settings. It is due to the fact that care guidelines in pathway are specified for each day which is organized by categories and specific item on the pathway are covered by routine orders. Moreover, the clinical pathway replaces the physician progress notes and the nursing care plan, but it does not replace the physician order (Parsons, Murgaugh, & O’Rourke, 1998).

Various studies from developed countries (Kwan, Hand, Dennis, & Sandercock, 2004; Rotter et al., 2010; Sternberg, 2007; Suleh, Evans, Melbourn, & Kalra, 2002) found that implementation of stroke clinical pathway has improved the compliance and quality of documentation. Similarly, Study conducted on Australian nurses regarding their perception about paediatric clinical pathway found that nurses liked clinical pathways because it saved their time and reduced documentation requirements but they also raised the issue that there is a need for staff education regarding pathway utilization (Roberts, Boldy, & Robertson, 2005). From developing country, a quasi-experimental study was conducted by Khowaja (2007), in Pakistan, reported that
documentation by physicians and nurses has improved because of Transurethral resection of prostate (TURP) pathway; however, this was not a direct study on documentation of pathway.

In contrast, different studies from developed countries (Johnston, 2006; Olajos-Clow, Szpiro, Julien, Minard, & Lougheed, 2009; Pace et al., 2002) revealed that documentation work has increased because of clinical pathway. A study by Hempling and Adhikari (2005) in UK assessed the quality of documentation in orthopaedic pathway. They found that doctors were least following the pathway, nurses were inconsistent and physiotherapists were excellent. Further they found that several sections of pathway were not filled at all and very few were filled half way. Moreover, very few were able to mention date and sign the pathway.

It is important to note that all above studies have been conducted on different pathways and there is a limitation of GI bleed pathway.

**Barriers of documentation in Clinical Pathway**

Literature review reveals that only five studies have been conducted to identify the factors which hinder nurses and physicians documentation of pathway. As expected, all five studies have been conducted from developed countries. A study by Olajos-Clow et al., (2009), in Canada explored the healthcare providers' perceptions about barriers for asthma care pathway implementation. This study included physicians, nurses, respiratory therapists, and administrators as participants of the study. They found that length of pathway and lack of time was common barriers. Another triangulated research study from Canada by Hayes et al., (2010), revealed that the major reason for non-compliance with UGIB guidelines included lack of knowledge of nurses and physicians and limited belief in the value of guidelines.

Moreover, study by Pace et al., (2002) found that barriers to implement the congestive heart failure pathway were lack of individualization of care, increased risk of liability, increased documentation and decreased professional autonomy. On the other hand, study from Johnston (2006) study conducted in UK found that structure of integrated care pathway of stroke did not lend itself to easy documentation while nurses were the only participant in this study. Similarly, Claridge et al., (2005) explored the attitude of health care professionals towards integrated care pathway. This study was conducted among six health care professionals including nurses, physicians, professions allied to medicine, a member of community health council and non-clinical managers. Findings of this study revealed that lack of time both to learn about integrated care pathway use and to actually use them properly during a busy shift was a major barrier among them.

In contrast to above studies, nothing studied from developing countries and specifically focused on nurses and physicians to identify the barriers of documentation in GI pathway.

**Conclusion and Recommendation:**

After reviewing the literature, it has been analyzed that various studies have been conducted from developed countries on different pathway like TURP, stroke, orthopaedic, surgery and GI but very limited study has been done from developing countries including Pakistan. Although few studies have found the impact of GI bleed pathway on patient’s length of stay, hospital cost and patient outcome; however, no direct study has been done to evaluate the impact of GI bleed pathway on documentation. Moreover, none of the study has been conducted to identify the factors affecting nurses and physicians documentation on GI bleed pathway. Hence, globally there is a gap in literature regarding physicians and nurses’ practice towards documentation of GI bleed pathway.

Considering the limited data available on the phenomenon of interest, a basic level of study is needed to estimate the proportion of documentation by physician and nurses on GI bleed pathway. This will provide insight to the nurses, physicians and the management personal of health care settings regarding barriers of documentation in clinical pathway. Moreover, it will facilitate the management staff to develop and implement pertinent strategies to overcome the issue of managing GI bleed patients and to improve patients’ quality of care.

Finally, it may lead to further research with the aim of improving documentation in pathway among nurses and physicians.

**References:**


Effectiveness of an information booklet on knowledge regarding care of autistic child

Vijayarani M*†, Nagarajaiah‡, Mukesh YP§, Balamurugan G∥

ABSTRACT

Background: Despite the growing incidence of autism, there is very little awareness on this developmental disability affecting 3-4 children in every 1,000 born in India today. Aim: To prepare and evaluate the effectiveness of the information booklet on the level of knowledge of the caregivers in the care of child with autism.

Methods: Study was carried out by among 30 caregivers who were attending the inpatient and outpatient of child psychiatric centre, NIMHANS. A quasi experimental design with single group pretest - post test was used. A purposive sampling was used to select the caregivers. After the pre-test the caregivers were given the information booklet. The post-test was conducted on the seventh day of administration of the information booklet.

Results: Findings revealed that, there was significant difference in the pre and post test scores on various dimension of knowledge questionnaire demonstrated the effectiveness of the information booklet. It was found that the post-test knowledge score was having statistically significant association with three socio demographic variables.

Conclusion: According to this study information booklet can be used as one of the Information Education and Communication (IEC) materials to improve the knowledge of autism care givers.

Keywords: Information Booklet; Autism; Caregivers.

*Corresponding Author
Asst. Prof, Dept. of Mental Health Nursing, ESIC College of Nursing, Bangalore. e-mail: mavijayarani@gmail.com

© 2012 International Journal of Nursing
This is an Open Access article distributed under the terms of the Creative Commons Attribution License (http://creativecommons.org/licenses/by/2.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.
**Introduction:**

The importance of childhood is well emphasized both in the ancient and modern literature. Children are the pillars of tomorrow. Children are vital to the nation’s present and its future (WHO, 2003). In recent years, there has been an increased focus on issues that affect children and on improving their mental health (University Centre for Excellence in Developmental Disabilities Education, Research, 2007). Despite the growing incidence of autism, there is very little awareness on this developmental disability affecting 3-4 children in every 1,000 born in India today.

A study conducted by the Rehabilitation Council of India shows that the prevalence is 3-4 per 1,000 live births now in India which was 1 in 10,000 ten years ago. According to estimates, over 20 lakhs people are living with autism in India. World Health Organization puts the global prevalence at 1 in 500. However, no empirical studies have been done in India to establish these figures as yet. (University Centre for Excellence in Developmental Disabilities Education, Research, 2007)

A child diagnosed with autism may represent a constant source of stress on the family unit, as not only the caregivers affected, but also siblings and relationships among family members (Sanders JL, 1997). Parents of children with autism were more likely to score in the high aggravation range (55%) than parents of children with developmental problems other than autism (Schieve LA, Blumberg SJ, Rice C, Visser SN, 2009). Having to cope with the physical and emotional demands of caring for a child with autism poses a threat to the psychosocial wellbeing of parents and caregivers (Gray DE, 1992).

Caregivers of children with autism often experience helplessness; feelings of inadequacy and failure; anger; shock; guilt; frustration; and resentment (Jones, 1997). Also it was reported that mental health of children depends on the parenting. Raising a child with a disability, particularly a confounding disorder like autism, challenges parents in extraordinary ways (University Centre for Excellence in Developmental Disabilities Education, Research, 2007).

**Need for the study:**

With knowledge of autism we can avoid aggravating the situation for children with autism (Wolff, 2004). The knowledge of the caregivers regarding the care of children with autism is highly important in rearing a child with autism. Knowledge of the caregivers is important in assessing the signs and symptoms, current condition, recurrence risk, carrying out the instructions and interventions prescribed by the physician, identifying the side effects of medications and handling the common behaviour problems at home.

But the knowledge of the caregivers regarding the care of children with autism is inadequate. This is evident by a study conducted by Whitelaw et al (2007) who aimed at describing the recurrence risk information currently being obtained by families affected by autism. They used methods of structured telephone interview of parents of 21 children who received a diagnosis of autism at Calvary Health Care, Australia between May 2005 and May 2006. Results reveal that only one of the 21 parents knew their true recurrence risk. Many overestimated their risk substantially, and in four cases this had led to a decision against increasing family size. Eleven parents said they had received no information about recurrence risk, and only one cited medical practitioners as a source of information about recurrence risk. It was concluded that current provision of information about recurrence risk to families affected by autism is inadequate.

Thus through education and knowledge people with autism can considerably improve their level of functioning and quality of life. The need for information for the caregivers on a variety of unexpected skills, and support, is immediate and urgent (Whitelaw C, Flett P, 2007).

Research has demonstrated that parents can be effective implementers of behavioural, social, and communication programmes with their children with autism. Researchers have studied the effects of including parents as direct service providers in their children’s intervention process as a means of increasing the quantity and availability of intervention (Koegel LK, Koegel RL, Kellegrew D, 1996).

It is important to identify children with autism and begin appropriate interventions as soon as possible since such early intervention may help
speed the child’s overall development, reduce inappropriate behaviours, and lead to better long-term functional outcomes (McConachie H, 2007). Parent education programmes have become an effective mode of treatment delivery for teaching families effective behavioural strategies to manage challenging behaviours in young children with autism (G. Stahmer AM, 2001).

While the disorder is not rare, a majority of children with autism, even in urban India, have not been diagnosed and do not receive the services they need. This problem occurs in many countries, but is especially true in India, where there is a tremendous lack of awareness and misunderstanding is very common. In India low awareness levels and high levels of stigmatization, there is an increased need for public education programmes on the care of children with autism. Thus there is an urgent need to begin planning for the education of the caregivers in India. Not much work has been done in the Indian context focusing on parent’s difficulties and struggles and how a parent can cope with them most effectively.

Even less is known about the levels of parental involvement in the whole process. Few studies have been conducted on the level of knowledge of caregivers on the care of children with autism. Also very limited studies were conducted on the effectiveness on parental educational interventions. Families of children with autism need adequate knowledge about care of children with autism. In a country like India, where the awareness about autism is still emerging, and the availability of services is in rather short supply, the role of the service provider would best be described as multifaceted-an information provider, a leader, a supporter, and a guide. There is a great need for the education of caregiver is high (Gupta, 2005).

Tonge B 2006 identified that the manual based parent education and behaviour management intervention was effective in alleviating a greater percentage of anxiety, insomnia, and somatic symptoms and family dysfunction than parent education and counselling at 6-month follow-up (Tonge B, Brereton A, Kiomall M, Mackinnon A, King N, 2006). So effective educational interventional programme need to be planned and implemented (Gupta, 2005).

When caring the child with autism the parents need to be confident and comfortable, so that they could support the child. The purpose of this research is to provide a teaching tool for the caregivers who involve in the training of young children with autism. It is intended that the book may be useful for the caregivers in handling the day today problems of children with autism at home. Research pertaining to educational intervention through information booklet for the caregivers of children with autism is minimal.

There is a significant need for educational intervention strategies with this population. Tertiary care setting like NIMHANS helps in diagnosis. But managing the children and assisting children to gain skills in different spheres of life lies in the hands of the caregivers. Therefore caregivers need information booklet as a source of knowledge about the care of children with autism.

In the view of the above the current study focuses on assessing the knowledge and opinion of the caregiver towards care of children with autism. Also the present study aims at developing and evaluating the effectiveness self instructional material in the form of information booklet for the care of children with autism on the level of knowledge and opinion, would help in finding out how instructional materials can be prepared and utilized effectively among the caregivers. Further more this study can have implications in finding out and modifying the problems children with autism.

Through research on children health is profoundly conducted in educational institutions and health centres it would reach the public only through social action programme aiming at comprehensive health education. Actually the relevance of such researcher is determined only when the propounded tenants are put into practice by the caregivers. In other words, the root of their happiness and unhappiness are inextricably interviewed with psycho social interiors of their family living. It is the caregivers in the family who need to help the children with the core deficits in autism, in this regard nurses who are in touch with both the children and caregivers can help through education.

The purpose of the study was to prepare the information booklet on care of children with autism for the caregivers and to evaluate the effectiveness of the information booklet on the level of knowledge of the caregivers in the care of child with autism.

**Design:**

A quasi experimental research design with
Setting and Population:

The study was conducted in the Child Psychiatry Centre, National Institute of mental health and Neurosciences (NIMHANS), Bangalore, Karnataka, India. Caregivers who attended the outpatient and inpatient Child psychiatric centre of NIMHANS, Bangalore were selected as the samples on the basis of the inclusion and exclusion criteria. Inclusion criteria's were 1. Those caregivers who are attending the outpatient and inpatient of child psychiatric centre of NIMHANS for the treatment of autism 2. Those caregivers whose children have been diagnosed as autism after the detailed workup is over 3. Those caregivers who understand, read and write English 4. Those caregivers of Children with autism between the ages of 4 – 14 yrs and 5. Those caregivers between the age group of 16 – 50 yrs. Exclusion criteria was the caregivers who had undergone any special course in the Care of children with autism.

Sample size and Method:

A purposive sampling technique was adopted for the present study to select subjects on the basis of inclusion and exclusion criteria. 30 caregivers of children with autism who were attending outpatient and inpatient Child psychiatric centre of NIMHANS, Bangalore selected as per the inclusion criteria.

Measures:

As there was no standard tool available to match the current study the tools were developed by the researcher. The relevant research and non-research literatures were reviewed for constructing the tools. Experts in the field of psychiatric nursing, psychiatry, and psychiatric social work were consulted for the opinion and suggestions in developing the tools. The following tools were used for the study.

Tool-1: Sociodemographic data schedule:

The Sociodemographic data schedule consisted of 14 items including various Sociodemographic details such as code of the caregiver, age of the caregiver, gender of the caregiver, primary caregiver, caregiver relationship the child, marital status of the caregiver, educational status of the caregiver, occupational status of the caregiver, income of the family, residence, state, mother tongue, any training in autism and willingness to know more about the condition

Tool-2: Knowledge questionnaire on care of children with autism.

The knowledge questionnaire consisted of 30 multiple choice questions. The knowledge questionnaire was designed on 5 dimensions such as Concept of autism, Signs and symptoms, causes and common problems of autism, assessment, Diagnosis & Interventions and Handling common behavioural problems at home.

Scoring:

Each correct answer was given a score of 1 and for wrong answer Zero. The maximum score was 30. Scoring interpretation is done based on the following: <50% - inadequate knowledge, 50% - 75% moderately adequate knowledge and >75% adequate knowledge.

Reliability:

Split half method was used to establish reliability of the knowledge questionnaire. For knowledge questionnaire the reliability was 0.9895 (Guttmann split half method) which was highly statistically significant.

Information booklet:

An extensive literature review was done to find out the various dimensions of care of children with autism. Review of books on autism, child psychiatry, child psychology, parental manuals on autism, psychiatric nursing books were reviewed. Also extensive search was done in Medline, Psychinfo, EBSCO, Proquest, and Pubmedcentral to understand the content related to information booklet. Discussion with guides and specialists from department of Psychiatry, Psychiatric Nursing, Psychology and Psychiatric Social Work helped in identifying areas that should be covered in the booklet. With the information obtained from various sources, the content of information booklet was prepared. The content of the information booklet are Introduction to Autism, Facts and myths of autism, Signs and symptoms, Causes of Autism, Common problems that occur with autism, Assessment, Diagnosis and Interventions, Handling common behavioural problems at home, The National trust act, Websites for autism, Suggested readings for autism and Schools available for children with autism in Bangalore. 3 experts from Child Psychiatry, 3 from Psychiatric Nursing and 2 experts from Social Work vali-
dated the information booklet for applicability, feasibility, relevance, suitability and validity of its contents. Suggestions given by the experts with regard to the information booklet were duly incorporated and the information booklet was finalized. The information booklet was designed for learners to gain knowledge about the care of children with autism. The caregivers could study the information booklet whenever necessary. The subject matter was presented in simple language and it was organized in logical sequence.

Data collection procedure:

The researcher obtained permission form the department of Nursing, and Psychiatry for data collection at outpatient and inpatient of child psychiatric centre at NIMHANS. The participants were contacted for their willingness and consent to participate in the study. Socio-demographic details of the participants were obtained by administering the socio-demographic data sheet. The pre-test was administered by using the knowledge questionnaire. Soon after the data collection, the information booklet was given to the caregivers after a brief introduction to the topic. A period of 7 days was given to the caregivers for reading the information booklet. A post assessment was done by re-administering the same knowledge questionnaire. The caregivers in the outpatient settings were given a follow up date after one week whereas the caregivers in the inpatient were met after one week by the researcher. Knowledge scores were measured before the administration of information booklet. The information booklet was then introduced and their level of knowledge was reassessed. The effectiveness of the information booklet was then determined by comparing the pre-test and post test scores on the level of knowledge of the caregivers.

Results and Discussion

Sociodemographic data:

Approximately half of the caregivers (43.3%) participated in the study were between the age group of (35 – 40 yrs). A higher percentage (36.7%) of the caregivers were in the age group of 29-34yrs. A less percentage (3.3%) of the caregivers were in the age group of 23 – 28 years. These study findings were similar to the study conducted by Tonge B, Creighton A, Kiomall M, Mackinnon A, King N and Rinehart N. (2006) where the majority of the caregivers age were between 28-43 years (Tonge B, Creighton A, Kiomall M, Mackinnon A, King N, 2006).

Majority of the caregivers participated in the study were females (86.7%) where as a less percentage of the caregivers were males (13.3%). This implies that the majority of the females were the primary caregivers.

This study finding was similar to the study finding conducted by Mercer.L, Creighton S, Holden J JA and Lewis MES. (2006) in which majority 90% of the parents participated in study were females(Mercer L, Creighton S, Holden J JA, 2006).

All the caregivers (100%) participated in the study were primary caregivers. This showed that both males and females were taking the role of primary caregivers in caring the children with autism. This study finding was similar to a study conducted by Frazeze .L.B. (2004) in which all the participants in the study were primary caregivers(Frazeze, 2004).

A high percentage of the caregivers participated in the study were mothers (86.7%), and a less percentage (13.3%) of the caregivers were fathers. This showed that all the caregivers are primarily the parents not any other relatives. This study finding was similar to the study finding conducted by Mercer L, Creighton S, and Holden JJA, and Lewis MES (2006) in which majority (90%) of the parents participated in study were mothers(G. K. Stahmer AM, 2001).

All the caregivers participated in the study were married (100%). This study finding was similar to the findings of the study conducted by Stahmer.A.C and Gist.K (2001) where majority (98%) of the caregivers were married(Kasari C, Freeman FN, Bauminger N, 1999).

Half of the caregivers were post graduates (50%), approximately half of the caregivers were graduates (46.7%) and a least percentage of 3.3% were educated upto PUC. These results showed that the caregivers who were highly educated were coming forward for the treatment of children with autism. These findings were similar to a study conducted by Kasari.C, Freeman,F.N, Bauminger.N, and Alkin.N.C. (1999) in which majority of the caregivers (38%) were studied beyond Bachelor’s degree and only 6 % of them studied up to high school(Perry A, Prichard E.A, 2006).

Regarding the occupational status about half of the caregivers were employed in private (43.3%), one fourth of the caregivers were working in government (30%) and the others caregivers were house wives/home maker (26.7%). This showed that majority of the care-
givers were working. Both the parents were going for work had become the essential need of the life to meet the increased cost of living. Higher percentage of the caregivers family income was between 5,000-30,000 (73.3%), and a very least percentage of the caregivers family income was about 55,001- 85,000 (6.7%). 20% of the caregivers family income was between 30,001 – 55,000.

About two third of the caregivers were from urban area (76.6%) and one third of the caregivers were from rural area (23.3%). This showed that the caregivers from urban area were aware of the condition of the child and there were accessing the facilities available in NIMHANS. Majority of caregivers were from Karnataka (36.7%), others were from Tamilnadu (10%), Kerala (16.7%), West Bengal (23.3%), Orissa (3.3%), Maharaashtra (3.3), Assam (3.3%), Jhargarkand (3.3).

This would be because the hospital had been catering to the mental health needs of population of all age groups even prior to independence to India and had established popularity for its service. Also it indicates that caregivers from Karnataka as well as from other states of India were utilizing the services available in NIMHANS.

Majority of the caregiver’s mother tongue was Bengali (26.7%) and minority had their mother tongue as Hindi (3.3%) and Marvadi (3.3%). This would be because that many of the caregivers were from West Bengal and also caregivers speaking different languages got settled in Karnataka.

Majority of the caregivers were from nuclear family (56.7%) and a moderate percentage of the caregivers were from joint family (33%) and others (10%) were from extended family. It indicates that majority of the children with autism were from the nuclear families. Technological advances made the job available for the rural population to get migrated to cities and to form a nuclear family.

Almost two third of the caregivers were having 3-4 members (66.7%) in the family and least percentage of the caregivers had 7-8 members (6.7%) in the family. 26.7% of the caregivers had 5-6 members in their family. This indicated that majority of the children with autism were from the family consisting of less family members.

This could be because that India’s one of the health policies was to reduce the finding size to control population explosion. All the caregivers (100%) did not had any training in autism in the present study. This suggested that the caregivers were not undergoing any training in autism. This would be because they were unaware about the training programme or less availability of the training facilities.

These study findings were contrary to a study conducted by Perry A, Prichard E.A. and Penn H E. (2006), where 85% of the parents had attended professional workshops on Intensive Behavioural intervention for children with autism spectrum disorder (Perry A, Prichard E.A, 2006). When the caregivers were asked whether they wanted to know more about autism, all thirty caregivers (100%) reported yes. This showed that all the caregivers had the learning needs to know more about the children’s condition. All the caregivers (100%) were aware of their child’s diagnosis of Autism. This indicated that the caregivers been told about the child’s problem when they come to NIMHANS.

Effectiveness of the information booklet on the care of children with autism:

As the table 1 shows, in the concept of autism dimension (dimension one) the pre-test mean score was 1.93, mean percentage was 48.32% and post-test mean score was 3.33, mean percentage was 83.32%, knowledge gain was 1.4, paired t value was 6.96 and p value was 0.000 which was highly significant.

In the signs and symptoms of autism dimension (dimension two) the pre-test mean score was 3.9, mean percentage was 65% and post-test mean score was 5.46, mean percentage was 91.1%, knowledge gain was 1.56, paired t value was 0.41 and p value was 0.000 which was highly significant.

In the causes and common problems of autism (dimension three) the pre-test mean score was 2.86, mean percentage was 71.65% and post test mean score was 3.8, mean percentage was 95%, knowledge gain was 0.94, paired t value was 4.59 and p value was 0.000 which was highly significant.

In the assessment, diagnosis and intervention for autism (dimension four) the pre-test mean score was 3.1, mean percentage was 38.75% and post test mean score was 5.66, mean percentage was 70.82%, knowledge gain was 2.56, paired t value was 8.86 and p value was 0.000 which was highly significant.
8.60 and p value was 0.000 which was highly significant.

In the handling common behaviour problems of children with autism at home (dimension five) the pre-test mean score was 3.1, mean percentage was 38.75% and post test mean score was 5.7, mean percentage was 71.25%, knowledge gain was 2.6, paired t value was 11.4 and p value was 0.000 which was highly significant. It was inferred that in all the five dimensions the subjects gained knowledge at significant level by the effect of the information booklet, which was given to the caregivers of children with autism.

As the caregivers were living with the problems of their children their knowledge score in the dimension of causes and common problems (third dimension) was high in the post test. Also in the dimension of concept of autism (first dimension) and signs and symptoms (second dimension) the caregivers were aware of it they were able easily understand it, so their score on these dimensions were also adequate.

As the caregivers were not having the background for the understanding of the medical procedures they scored only moderately adequate knowledge in the dimension of assessment, diagnosis and intervention (fourth dimension) and handling the common behaviour problems at home (fifth dimension).


The parent education and behaviour management intervention was effective in alleviating a greater percentage of anxiety, insomnia, and somatic symptoms and family (Tonge B, Brereton A, Kiomall M, Mackinnon A, King N, 2006). Yet another study finding was similar to that of present study wherein Probst_P. (2003)
evaluated the effectiveness of psycho educational programs conducted for the parents of children with autism and found knowledge score improvement in the post test (Probst, 2003).

This findings were similar to that of study findings of Leslie J J, Oscar G, Della B, jane B and Joseph R K (1998) where it revealed that there were greater gains in language abilities, significant increase in caregivers’ knowledge about autism, greater perception of control on the part of mothers, and greater parent satisfaction after the intervention (Leslie JJ, Oscar G, Della B, Jane B, 1998)

Association between selected socio demographic variables and post knowledge scores.

The selected socio demographic variables and the post-test knowledge scores were statistically analyzed for their association. It was found that only three variables were having association with the post-test knowledge scores namely type of schooling of the children, gender of the caregiver and the relationship of the caregiver to the child. The remaining variables such as currently in therapy, past therapy, age of the caregiver, education level of the caregiver, occupational status of the caregiver, monthly family income, residence, state, mother tongue and family history of speech delay and MR had not shown statistically significant association with the post-test knowledge scores.

Limitations:

Due to the lack of availability of enough samples the study was conducted in two different settings such as outpatient and inpatient settings. Also the study subjects were limited to only 30 subjects. Smaller sample size made it difficult to generalize the findings. Long term follow up evaluation was not done due to time constraint.

Suggestions for future research

- The study can be replicated with larger sample to generalize the findings.
- Using true experimental design, independent effects of the information booklet can be assessed.
- A follow up programme can be done to determine the long term effect of the information booklet.
- A study may be conducted to compare the effect of the information booklet on the caregivers in the inpatient and outpatient department.
- A study can be done to compare efficacy of information booklet with other education teaching strategies.
- It was also recommended that the study could be replicated using a randomization and a larger sample having control group to improve the external validity of the research design.
- Application of the knowledge of caregivers in the home care setting can be studied.
- Using a qualitative research approach is an appropriate method to the study the opinion may be under taken. Thus a qualitative study can be implied to investigate the essence of opinion among caregivers about the care of children with autism.

Conclusion:

This study had shown that the information booklet can increase the level of knowledge of caregivers regarding the care of children with autism. There fore it is concluded that the information booklet was effective in improving the knowledge of the caregivers towards the care of children with autism and helped in strengthening the positive. It also helped in creating a positive opinion among the caregivers towards the care of children with autism. Caregivers who read the information booklet can bring out long-term change in the children’s behaviour there by improving their quality of life.

Reference:


WHO. (2003). *Caring for children and adolescents with mental disorders - Setting WHO directions* (pp. 2–9).

Background: Survey of satisfaction from education line at the school is considered one of the fundamental issues and essential component activities in the area of behavior and organizational performance. The aim of this study was to measure nursing students’ satisfaction in School of nursing and midwifery.

Methods: This cross sectional study was analyzed nursing students’ satisfaction in six key areas. The data collection instrument was a questionnaire. The results showed that nursing students had little satisfaction with three key areas (school educational environment, clinical education environment, education review by school teachers, clinical education by clinical instructors, Communication with colleagues and social prestige).

Results: The findings indicate that students had very little satisfaction with three key areas (evaluation by school teachers, evaluation of clinical instructors and quality of nursing management).

Conclusion: According to this study the majority of students were little satisfied. Therefore, the satisfaction of all activities performed at the university is effective in motivating and finally education quality Promotion.

Keywords: Satisfaction; Nursing; Nursing student
Introduction:

Satisfaction is a comfortable sensation that prepared after the individual needs of educational, cultural, welfare and etc (Javadi Parsa & Janpors, 1998-99). One of the important indicators of progress predetermined and achievement goals of every society was a motivated and cholera task force (Abazari & Vafakhah, 2001). Since the main audience of students and higher education are important elements, present their views in the world as an essential factor to be considered in the monitoring of quality in universities (Kebriyai, Rodbari, Rakhshaninejad & Mirlotfi, 2005). In this regard, nursing needs the interested persons with the special ability. Inform and selection of interested students in these branches is tangible, because of student apathy in employment at the profession lead to adverse impact on the quantity and quality of nursing care services (Abazari & Vafakhah, 2001). Results of a study at Tehran University of Medical Sciences, shows that only 17 percent of nursing students have a positive view of their profession and 69 percent of them have agreed to leave the profession. Also had no positive social bases of the factors causing dissatisfaction among nurses were been considered, which can cause corrosion over or put off students from continue in the profession (Joolaee, Mehrdad & Bohrani, 2006).

There are so many factors that together can cause the people are satisfied with their discipline. There was perhaps only a factor of all these factors can cause decrease in satisfaction or was dissatisfied among the people in his or her field. Numerous studies have shown that prior information of student discipline, social prestige, relationship coaches and university teachers and hospital personals with student, educational facilities of the relevant administrative procedures was the main causes of the degree of satisfaction among students. According to research results, a positive relationship exists between process management and customer satisfaction, just as the quality of customer satisfaction is an important task (Maddern, Maul & Smart 2006; Dayang, Abang & Francine, 2009).

More than 60 percent of nursing students that have the new chance to choose this field is not willing to choose this field (Sattari, Jamalian & Seifalslami, 2000). Thus, according to the above, researcher decide to conduct a research with aimed to measure students’ satisfaction in School of Nursing and Midwifery.

Finally, this research findings lead to improve the quality of care and health promotion and will be aware the relevant authorities of deficiencies in nursing education.

Materials:

This is a cross sectional study (descriptive – analytical) performed in School of Nursing and Midwifery, Ahvaz Jundishapur University of Medical sciences. In this study, nursing students’ satisfaction was studied in six key areas (educational and clinical environment, educators, social prestige, communication with colleagues and nursing management). The research community was all second to fourth years of undergraduate nursing students (92 Students) from nursing and midwifery school. Required information was collected from the entire study population.

The data collection instrument, was a researcher made questionnaire including 13 questions about demographic characteristics [location of Institution - education state - age - the total average - Location - marital status - father, mother’s occupation ] and 74 questions about students satisfaction in six areas, the learning environment (question 30-1), the clinical environment (question 46-31), coaches (from question 51 - 47), social prestige (question 58-52), Communication with colleagues (from 68-59) and nursing management (question 74-69) were studied. For each question, answer as (completely not satisfied, very little satisfied, little satisfied, moderately satisfied, very satisfied and high satisfied) is considered. That information was collected with the permission of the relevant organizations and researcher presence in Ahvaz Nursing and Midwifery School (the necessary training on how to complete the questionnaire was done).

Answers scoring way was point zero for completely dissatisfied, 1 for very little satisfied, 2 for little satisfaction, 3 for medium satisfaction, 4 for high satisfaction and 5 for very high satisfaction response. The minimum score of general satisfaction concerning educational field for each person is zero and maximum score is 370 that is as follows in different areas:

The learning environment: from zero to 25 completely dissatisfied, 26 to 50 for very little satisfied, 51 to 75 little satisfied 76 to 100 moderately satisfied 101 to 125 high satisfactions and 126 to 130 very high satisfactions.
Clinical environment: from zero to 13 completely dissatisfied, 14 to 26 for very little satisfaction, 27 to 39 little satisfaction and 40 to 52 moderately satisfied, 53 to 65 very satisfied and 66 to 80 very high satisfactions.

Coaches: from zero to 4 completely dissatisfied, 5 to 8 for the very little satisfaction, 9 to 12 little satisfaction, 13 to 16 moderately satisfied, 17 to 20 very satisfied and 21 to 25 very high satisfactions.

Social aspect: from zero to 5 completely dissatisfied, 6 to 11 for very little satisfaction, 12 to 17 little satisfaction, 18 to 23 moderately satisfied, 24 to 29 very satisfied and 30 to 35 very high satisfied.

Communication with colleagues: From zero to 8 completely dissatisfied, 9 to 16 very little satisfaction, 17 to 24 little satisfaction, 25 to 32 moderately satisfaction, 33 to 40 very satisfaction and 41 to 50 very high satisfaction.

Nursing management: from zero to 5 completely dissatisfied, 6 to 10 very little satisfaction, 11 to 15 little satisfaction, moderately satisfied with 16 to 20, 21 to 25 high satisfaction and 26 to 30 for very high satisfaction.

To determine validity, the questionnaire was provided for several faculty members of university for review and prepared their comments.

Reliability of the questionnaire was determined based on the results of a preliminary study with participated 25 students for the entire questionnaire using alpha cronbach coefficient that the rate was 94%. Also the rate of 91% for educational environment, clinical environment 71%, teachers 83%, 85% of the social prestige that associated with 86% managing partners, 88% Communication with colleagues that indicate internal consistency is acceptable.

In order to analyze data from statistical software for quantitative variables and descriptive statistical techniques such as frequency distribution tables and charts were used. The chi-square statistical tests to verify the relationship between qualitative variables, t tests and Pearson correlation coefficient was used. The significance level for all tests with \( p = 0.05 \) was considered.

Results:

Most studied units are in the third year of study and the mean age of subjects was (21.1522) and had (16.4363) mean average. Most units of study are living in dormitory and the majority of students were single. Most units' father's occupation has been free and most subjects' mother's occupation is householder (Table 1).

Most subjects had little satisfaction of the conditions of learning environment; most subjects had little satisfaction with the clinical training environment. Most of the units studied were little satisfied from instructors clinical training. Most of the subjects were little satisfied from mentors clinical teaching, most units had very little satisfaction from evaluation process of mentors, most of the subjects had little satisfaction from Communication with colleagues, most subjects had little satisfaction of social prestige, most subjects had very little satisfaction of nursing management (Table 2).

Discussion:

Students as a key element of university are consisting of the main figures of various community organizations in the future. The satisfaction of all activities conducted at the University can be the attitude of their profession in order to maintain motivation and promote quality education to be effective (Heidari, Khalaj & Jafarian, 2001). The aim of this study was to measure nursing students’ satisfaction in nursing and midwifery school of Ahvaz Jundishapur University of Medical Sciences.

The majority of students in this study were little satisfied from their educational branches. In this regard, Siadat (2005) in their study concluded that graduate students not satisfied at the University of Education in four areas of performance management, administrative, educational, quality, accountability and supervision, and believe that educational management is unable to perform his duties even at moderate levels (Siadat, Shams, homaie & Gharibi, 2005).so the present study is consistent with that findings.

There was a significant relationship between Consent and education status of mother and father, location and total average. The majority of units were from learning environment condition of little satisfaction was done a study on the Saddleback College student satisfaction and concluded that 78 percent of students in general
Table 1. Nursing students’ satisfaction according to demographic features (n=92)

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Educational status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fourth year</td>
<td>25</td>
<td>27.2</td>
</tr>
<tr>
<td>Third year</td>
<td>40</td>
<td>43.5</td>
</tr>
<tr>
<td>Second year</td>
<td>27</td>
<td>29.3</td>
</tr>
<tr>
<td><strong>Marital status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>2</td>
<td>2.2</td>
</tr>
<tr>
<td>Single</td>
<td>90</td>
<td>97.8</td>
</tr>
<tr>
<td><strong>Dwelling</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non dormitory</td>
<td>14</td>
<td>15.2</td>
</tr>
<tr>
<td>Dormitory</td>
<td>78</td>
<td>84.8</td>
</tr>
<tr>
<td><strong>Father’s job</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employee</td>
<td>20</td>
<td>21.7</td>
</tr>
<tr>
<td>Worker</td>
<td>7</td>
<td>7.6</td>
</tr>
<tr>
<td>Retired</td>
<td>25</td>
<td>27.2</td>
</tr>
<tr>
<td>Free</td>
<td>30</td>
<td>32.6</td>
</tr>
<tr>
<td>Other</td>
<td>10</td>
<td>10.9</td>
</tr>
<tr>
<td><strong>Mother’s job</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employee</td>
<td>10</td>
<td>10.9</td>
</tr>
<tr>
<td>Householders</td>
<td>80</td>
<td>87</td>
</tr>
<tr>
<td>Retired</td>
<td>1</td>
<td>0.6</td>
</tr>
<tr>
<td>Free</td>
<td>1</td>
<td>0.6</td>
</tr>
<tr>
<td>Other</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Table 2. Nursing students’ satisfaction (n=92) cont.

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Clinical evaluation by clinical teacher</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very high satisfaction</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>High satisfaction</td>
<td>3</td>
<td>3.3</td>
</tr>
<tr>
<td>Mean satisfaction</td>
<td>23</td>
<td>25</td>
</tr>
<tr>
<td>Little satisfaction</td>
<td>31</td>
<td>33.7</td>
</tr>
<tr>
<td>Very little satisfaction</td>
<td>24</td>
<td>26.1</td>
</tr>
<tr>
<td>Completely dissatisfied</td>
<td>11</td>
<td>12</td>
</tr>
<tr>
<td><strong>Evaluation by school teachers</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very high satisfaction</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>High satisfaction</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Mean satisfaction</td>
<td>13</td>
<td>14.1</td>
</tr>
<tr>
<td>Little satisfaction</td>
<td>31</td>
<td>33.7</td>
</tr>
<tr>
<td>Very little satisfaction</td>
<td>33</td>
<td>35.9</td>
</tr>
<tr>
<td>Completely dissatisfied</td>
<td>15</td>
<td>16.3</td>
</tr>
<tr>
<td><strong>Evaluation by clinical trainers</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very high satisfaction</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>High satisfaction</td>
<td>1</td>
<td>1.1</td>
</tr>
<tr>
<td>Mean satisfaction</td>
<td>12</td>
<td>13</td>
</tr>
<tr>
<td>Little satisfaction</td>
<td>20</td>
<td>21.7</td>
</tr>
<tr>
<td>Very little satisfaction</td>
<td>33</td>
<td>35.9</td>
</tr>
<tr>
<td>Completely dissatisfied</td>
<td>26</td>
<td>28.3</td>
</tr>
<tr>
<td><strong>Communication with colleagues</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very high satisfaction</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>High satisfaction</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Mean satisfaction</td>
<td>1</td>
<td>1.1</td>
</tr>
<tr>
<td>Little satisfaction</td>
<td>76</td>
<td>82.6</td>
</tr>
<tr>
<td>Very little satisfaction</td>
<td>9</td>
<td>9.8</td>
</tr>
<tr>
<td>Completely dissatisfied</td>
<td>6</td>
<td>6.5</td>
</tr>
<tr>
<td><strong>Social image</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very high satisfaction</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>High satisfaction</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Mean satisfaction</td>
<td>16</td>
<td>17.4</td>
</tr>
<tr>
<td>Little satisfaction</td>
<td>54</td>
<td>58.7</td>
</tr>
<tr>
<td>Very little satisfaction</td>
<td>16</td>
<td>17.4</td>
</tr>
<tr>
<td>Completely dissatisfied</td>
<td>6</td>
<td>6.5</td>
</tr>
<tr>
<td><strong>Nursing management</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very high satisfaction</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>High satisfaction</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Mean satisfaction</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Little satisfaction</td>
<td>2</td>
<td>2.2</td>
</tr>
<tr>
<td>Very little satisfaction</td>
<td>57</td>
<td>62</td>
</tr>
<tr>
<td>Completely dissatisfied</td>
<td>33</td>
<td>35.9</td>
</tr>
</tbody>
</table>

Table 3. Nursing students’ satisfaction (n=92) cont.
had satisfaction from university services. This is not consistent with the results of this study and may be different because of the research environment differences. The findings of this study showed that the majority of nursing students' had little satisfaction from clinical learning environment. In this regard (Glossop, 2001) refers to the importance of student satisfaction as the main factors hindering the education and clinical work of student dropout. Also (Abedini & et al,2008) stated that the most important problems in clinical education of students are lack of amenities (71.2%), lack of adequate teaching space (39%), lack of teaching aids in clinical (37.3%), inadequate facilities in educational center (35.6%) and shortage of experienced teachers to teach in clinical settings (35.6%).

Despite of this, various studies have shown that any problems such as inconsistencies between theory and clinical practice, not specification the goals of clinical education, stressful hospital environment, less willing of high experienced coaches to participate in clinical training environment, not actual assessment and the lack of educational facilities are the obstacles to achieving the objectives of this period (Zaighami, Faseleh, Jahanniri, Ghodsin, 2004; Dehghani, Dehghani, Fallahzadeh, 2005; Peirce, 1997; Paterson, 1997; Pryjmachuk, 1996 & Roberts, Tabloski, Bova, 1997).

According to this research finding the majority of students have had little satisfaction on how teachers teaching. Liverpool University shows that according of the students views of the highest importance is given to education and learning and less importance to the physical facilities and the satisfaction levels in the least important parts is less important of the sector parts (Douglas, Douglas & Barnes, 2006) that the present study is consistent with those results.

The present results showed that the majority of students in clinical training had little satisfaction by the mentors. In this regards, the results of Nsyryany (2004) that in related the effectiveness of clinical training in clinical skills of medical surgical nursing graduates indicated that the acquisition of this skill level is weak. When nurses and nursing students are complaining that the content of this theory is not taught in the clinical and nursing care and cattle do not have the opportunity to learn (Nikbakht Nasrabadi, Movaghari, 2001).

Perhaps both are unaware of available learning opportunities, because the teaching and learning with some degree depends on the attitude and experienced coaches who help students learn more from each position to use the hospital. And help to take students any action to be considered as a learning experience (Movaghar & Soghrati, 2007).

The other problem for the training course was mentioned shortage of experienced trainers (35.6%). In this regard, other studies have shown that the ability of new nurses and clinical skills to meet the expectations of patients and health care team and managers have failed (Dehghani, Dehghani & Fallahzadeh, 2005). The present study showed that the majority of nursing students were less satisfied with the evaluation by clinical instructors. In relation to this study, (Mohammadi & et al, 2005) related on problems in clinical education instructors and senior nursing students indicate that most teachers and students believed that have a mismatch in evaluation forms and clinical environment conditions and mentioned the different evaluation practices among teachers.

According the opinion of Nehring (1990) students as recipients of professional services of teachers, are the best source for the identification of clinical teaching behaviors of their instructors. Identify existing problems in the clinical training of students and then proceeded to eliminate them and improve the training of skilled personnel and to achieve educational goals and ultimately provide high quality care is needed. Results from this study showed that the majority of students were less satisfied from communication with colleagues. Researches finding suggests the lack of consent with attitudes of students in the field and personal relationships with students. Among the options, lack of student support personnel, Fierce and angry movement of personnel and lack of proper feedback from the students was the most of them won as barriers. This can lead to student apathy and negative attitudes towards learning (Kelly, 2007; Larry, 2006 & Sehati Shafayi, 2006).

According to the results of this study students were little satisfactory from social prestige. In this regard Saberian (1998) mentioned that the negative attitude of people towards the wrong video nursing profession in general minds reasons and discouraged students to consider on school quality and student work that could affect adverse effects. In many studies the negative attitude of nurses and other health team personnel and the hard routine of hospital part were the other factors that have been reported for the Dropout in nursing.
education (Royal College of Nursing Australia (RONA), 2002). The majority of student's satisfaction was very low from nursing management process. Organization management training has a special sensitivity. Because these organizations are dealing with human and to developing its people to become innovative, creative and are aware that have strategic role to play in society (Morgan, King & Robinson, 1984).

The first successful strategies and priorities of the successful present organizations in the world, is customer oriented and customer satisfaction (Hughes, 1998). Consequences of negligence in carrying out community organizations and institutions are more notice to relevant organizations (Robbins, 1991). But not have program, officials and staff negligence in providing educational services to learners, realized the community. It is required that employees with high effort and endeavor, to provide appropriate services to students (Siadat, Shams, homaei & Gharibi, 2005). Also to achieve greater satisfaction of students as consumers of educational services and student recipient's continuous quality improvement of services should be attempted (Mansourian, 2003).

Conclusion:

According to the students in this study in most cases had little satisfaction and in management domain had very little satisfaction, therefore university administrators and staff should more try to improve the quality and quantity of services. Proper planning, improve processes, clarify the code of ethics of staff and management and staff awareness about the university’s mission can be effective in improving the services involved in student satisfaction.

Acknowledgment

I would like to acknowledge research assistance of Ahvaz Jundishapur University of Medical sciences for their material and spiritual support of U-87016 research plan that was so important for the completion

References:


Heidari, A.A., Khalaj, A.R., & Jafarian, N. (2001). The study of the students' attitude to related factor to education in Hamadan University of Medical Sciences Scientific Journal of Hamadan University of Medical Sciences & Health Services, 7(4), 30-35.


Mansourian, M.R. (2003). Total quality management (TQM) of


Royal College of Nursing Australia (RONA). (2002). Submission to the inquiry into long term strategies to address the aging of the Australian population over the next 40 years.


Hakim A. | Nursing students' satisfaction


Preparing Baccalaureate Nursing Students for Community/Public Health Nursing: Perceptions of Nurse Educators and Administrators

Bouchaud MT* a, Gurenlian JA b

a Asst. Prof, Assistant Professor, School of Nursing, Thomas Jefferson University . b Professor and Graduate Program Director, Department of Dental Hygiene, Idaho State University

Background: Educational preparation of baccalaureate nurses remains entrenched in yesterday’s health care, hospital-centric environment. A culture change among nurse educators and in nursing education is needed to prepare competent practitioners capable of practicing from a health promotion/ disease prevention, community/ population focused construct. Objective: This study utilized a qualitative phenomenological research design to determine the belief systems and values of baccalaureate nurse educators and administrators in preparing baccalaureate nursing students for community/public health nursing. Population: Thirteen nurse educators and six nurse administrators from two urban baccalaureate university schools of nursing participated in the study. Methods: An in-depth semi-structured interview based on Kotter’s 8-Step Change model was conducted. Results: Six distinct belief systems and five personal and professional values emerged from analysis of the data. The six belief systems were: health care is really changing, nursing curriculum needs to change, nursing care begins in the community, nursing continues to be a growing and emerging profession, the baccalaureate nursing degree needs to be the entry level degree for nursing practice, and the motivation for being a nurse is to help others. The five values were: professionalism, compassionate care, collaborative practice, community service, and honesty, integrity, and credibility. Change, conflict, and challenge emerged as the major themes. Interpretation: A need for re-envisioning nursing education and practice to improve patient care and promote patient health and wellness from a community and population focused perspective is prompting the need for nurse educators and administrators to re-define and prepare a new nursing workforce for the 21st century. For a change in the educational approach to preparing baccalaureate nursing students to occur, it is critical that baccalaureate nurse educators and administrators acknowledge the role their belief systems and values play in preparing baccalaureate nursing students for practice in the changing national and global societal and health care environment. Conclusion: Further research is needed to determine the best curricular approach for preparing baccalaureate nursing students for community/public health nursing practice.

Keywords: Community/public health nursing; belief systems; values; baccalaureate nursing education.

*Corresponding Author
Prof, Assistant Professor, School of Nursing, Thomas Jefferson University. e-mail: mary.bouchaud@jefferson.edu

© 2012 International Journal of Nursing
This is an Open Access article distributed under the terms of the Creative Commons Attribution License (http://creativecommons.org/licenses/by/2.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.
Introduction:

Preponderant influences affecting nursing education systems and the health care organizations in which nurses practice arise from the practical needs of the current health care system, contemporary health care issues, and funding and reimbursement availability (Feenstra, 2000; Stanhope and Lancaster, 2006). In the current national and global environment, the driving forces behind these influences are the shortage of nurses, the shortage of specialty trained nurses, and the changing demographics of the United States and global populations (Amos, Green, and McMurray, 2003; Moon, Henry, Connelly, and Kirsch, 2005; Rice and Fineman, 2004; Stanhope and Lancaster, 2006, 2008). These factors, coupled with the career aspirations of nursing students today, have created a shortage of community and public health nurses. The unprecedented acuity levels of patients being treated both in inpatient acute care settings and in outpatient community/public health-based settings are impacting the health care environment (Maurer and Smith, 2009; Stanhope and Lancaster, 2006).

Health care and its delivery system are in a state of chaos (Bartels, 2005; McNeil, Elfrink, and Pierce, 2004; Meservey, 1999; Pruitt and Epping-Jordan, 2005). Current diseases affecting health care resources and the economics of health care are the direct result of lifestyle behaviors such as obesity, diabetes, cancer, heart disease, stroke, and stress related disorders including mental illness and substance abuse and dependency disorders. These conditions are chronic, progressive, and costly in terms of treatment and maintenance, yet many are preventable (Maurer and Smith, 2009; Pruitt and Epping-Jordan, 2005; Stanhope and Lancaster, 2006). Because of advancements in technology, patients are living longer and with multiple and chronic conditions. Neither the nation as a whole nor the medical community has prepared for the extreme life extension into the 80’s, 90’s, and even 100 years of age (Maurer and Smith, 2009; Rice and Fineman, 2004; Stanhope and Lancaster, 2006).

National and global issues impacting the delivery of health care new to this millennium include an increase in devastating and destructive natural disasters, domestic terrorism and the threat of bio- terrorism, and increasing environmental health hazards (Maurer and Smith, 2009; Ellis and Hartley, 2004). An unstable economy, escalating unemployment, domestic violence, and violence occurring at very early ages place daunting pressures on the current health care delivery system. Additional stresses on the health care system include rising divorce rates and the changing definition and structure of the social institution of family, unwed and/or teen pregnancies, infant anomalies, increasing numbers of people who are either un-insured or under-insured, and illegal immigrants (Catalano, 2006; Health Issues Brief, 2001; Maurer and Smith, 2009; Stanhope and Lancaster, 2006).

Additional challenges affecting health care in the new millennium include the rising rates of disability, the need to contain costs without compromising the quality of health care delivery, and the pervasive belief that health and health care is a right. The United States has been a nation focused on the medical model of care instead of disease prevention and health promotion. But now societal trends and changes, along with the predisposed needs of the health care system, indicate that there is an increasing demand for health care professionals who can competently and effectively meet the health care needs of populations and communities (Fisher Robertson, 2004 Maurer and Smith, 2009).

The trend in nursing education is not just to increase the Bachelor of Science in Nursing (BSN) students’ experience working outside the hospital but to prepare nurses who are competent in population focused and community-based care. In these settings, the focus is on working with individuals and their families and on nursing care that stresses community as the client (American Association of Colleges of Nursing, 2002; Association of Community Health Nursing Educators, 2000, 2008; Feenstra, 2000; Maurer and Smith, 2009; Stanhope and Lancaster, 2006). The World Health Organization (WHO) has recommended that BSN curriculum emphasize community health practice that prepares future registered nurses to identify populations at risk and assess their health practices. This curriculum would enable new Registered Nurses (RNs) to plan, implement, and evaluate strategies to preserve, protect, and maintain the health and wellness of people living in communities while preventing disease, disability, and injury (Feenstra, 2000; Harkness and DeMarco, 2012).

This recommendation is mirrored in the statement put forth by the Association of Community Health Nursing Educators (ACHNE) (1993, 2000, & 2008). BSN curriculum should contain community
Preparing Baccalaureate Nursing Students for Community/Public Health Nursing: Nurse Educators and Administrators Perception

Bouchaud MT et.al | Preparing Baccalaureate Nursing Students for Community/Public Health Nursing: Nurse Educators and Administrators Perception

health nursing clinical content that reflects nursing care related to primary, secondary, and tertiary prevention strategies in promoting the health and well-being of individuals, families, and communities (American Association of Colleges of Nursing, 2008; Feenstra, 2000; Institute of Medicine, 2001, 2008, 2010).

Baccalaureate nursing education must begin to respond to the fact that the majority of illnesses and conditions in the 21st century are the direct result of preventable lifestyle behaviors (Bartels, 2005; Long, 2004; Maurer and Smith, 2009; Potter, 2007; Pruitt and Epping-Jordan, 2005; Stanhope and Lancaster, 2006). Baccalaureate nursing students need to be adequately prepared to identify health promotion programs focused on prevention (Maurer and Smith, 2009; Stanhope and Lancaster, 2006). They need to understand the origins of lifestyle behaviors before they can assist the community in identifying health issues and then developing health and wellness promotion programs. For some, the behaviors occur due to lack of knowledge (Donley, 2005). For others, the disease occurs due to a lack of early detection (Donley, 2005).

The foundational framework for this study is predicated on the premise that a relationship exists between the belief systems and values of baccalaureate nurse educators and administrators and the preparation of baccalaureate nursing students for Community/Public Health Nursing (C/PHN). This study is further predicated on the premise that if baccalaureate nurse educators and administrators do not believe in or value the paradigm shift from hospital-based care to community/public health-based care then there will be no change in the current preparation of baccalaureate nursing students regardless of the regulatory mandates and consumer/societal demands.

Creating new values and changing belief systems among baccalaureate nurse educators and administrators to adequately prepare baccalaureate nursing students for C/PHN requires significant change (Kotter, 2008). This change will require creating a new organizational culture grounded in the philosophical principle of health promotion and disease prevention. This is a sharp deviation from the historical and traditional structured medical model grounded in illness, diagnosis, and treatment from which nursing education has been and continues to be based.

Though the literature clearly supports the need for a change in the preparation of baccalaureate nursing students, it is not known if nurse educators and administrators believe in this need to change curriculum. The literature is lacking in studies that evaluate the effect of a standard baccalaureate nursing curriculum that offers one C/PHN course on preparing nursing students to meet the community/public health care demands of the 21st century. No studies or articles have been conducted or written on the existence of a BSN curriculum that eliminates the standard C/PHN course and clinical rotation and replaces it with C/PHN concepts and clinical experiences integrated throughout the curriculum.

In addition, no studies could be found in the literature nor was data available among baccalaureate nursing programs, state boards of nursing, or professional nursing organizations that attempted to elucidate the role of baccalaureate nurse educators and administrators in preparing baccalaureate nursing students for C/PHN in either a standard or modified BSN curriculum. Therefore, the purpose of this qualitative research study was to analyze the belief systems and values of baccalaureate nurse educators and administrators in relationship to preparing baccalaureate nursing students for C/PHN.

Methodology:

In this study, a naturalistic investigation via in-depth, semi-structured interviews of baccalaureate nurse educators and administrators who are currently employed in two urban university baccalaureate schools (UBS) of nursing was conducted. One school offered the traditional C/PHN and community clinical courses (UBS 1). The other baccalaureate school of nursing eliminated the traditional C/PHN and community clinical courses and replaced them with a C/PHN concepts and community clinical experience integrated curriculum (UBS 2). Kotter’s model of change (1990, 1996, 2002, & 2008) was used as the conceptual framework for this study examining the belief systems and values of baccalaureate nurse educators and administrators to determine its relationship to preparing baccalaureate nursing students for C/PHN. The focus of this qualitative research study was directed at the following four research questions.

- What are the belief systems and values of baccalaureate nurse educators and administrators in relationship to preparing baccalaureate nursing students for Community/public health nursing?
- How do the belief systems and values of baccalaureate nurse educators and administrators reflect the...
paradigm shift in health care delivery and nursing practice for the 21st century?

- How are the belief systems and values of baccalaureate nurse educators and administrators reflected in their teaching and administrative duties in relationship to preparing baccalaureate nursing students for Community/public health nursing?

- How do baccalaureate nurse educators and administrators believe they incorporate the values of Community/public health nursing in their baccalaureate nursing curriculum?

This study was approved by Capella University’s Institutional Review Board (IRB).

**Sampling Design**

A convenience sample was used which included baccalaureate nurse educators and administrators employed in urban university baccalaureate schools of nursing in the city of Philadelphia. Seven baccalaureate nurse educators and three baccalaureate nurse administrators from an urban university baccalaureate school of nursing in Philadelphia, Pennsylvania that offered the traditional C/PHN course and community clinical course were interviewed. Six baccalaureate nurse educators and three baccalaureate nurse administrators from an urban university baccalaureate school of nursing that eliminated the traditional C/PHN course and community clinical course and replaced it with a C/PHN concepts and community clinical experience integrated curriculum were interviewed. A total of nineteen subjects were interviewed.

Baccalaureate nurse educators who were actively teaching at least one baccalaureate nursing course were eligible for participation in this study. Baccalaureate nurse educators and nurse administrators had to be currently employed in the traditional baccalaureate school of nursing or in the baccalaureate school of nursing offering a C/PHN integrated curriculum to be eligible to participate in this study. The nurse administrators had to be in a position that directs baccalaureate nursing curriculum development and implementation, responsible for the oversight of curriculum development and implementation, and/or responsible for actually developing baccalaureate nursing curriculum.

The demographic analysis revealed that the study participants came from diverse educational, clinical, and ethnic backgrounds. Three participants began their nursing career as diploma prepared RNs, five started as associate degree prepared nurses, and eleven began as baccalaureate prepared nurses. However, at the time of the study, ten of the participants had achieved their doctoral degrees in nursing while nine were actively enrolled in doctoral programs. The age of those in the study ranged from 40-80 years of age with seven participants between 40-50 years of age, nine between 51-60 years of age, and one being seventy-three years old. The years of nursing experience among those in the study ranged from a minimum of 14 years to 50 years.

None of the study participants from UBS 2 began their nursing career in the specialty area of community and public health nursing. Only one nurse educator and one nurse administrator from UBS 1 began and have continued their clinical practice in community and public health nursing. In addition, these same two individuals, along with one nurse educator/administrator from UBS 2 maintain an active clinical practice in a nurse run public health setting outside their university roles and responsibilities. Of the nineteen study participants, all but one was female. All but two of the study participants were Caucasian. The remaining two individuals were African American and both were female.

**Data Collection**

The researcher developed and field-tested the interview protocol tool. Revisions were made to this tool in response to the comments received from those who participated in the field test. The researcher obtained written permission from all study participants prior to conducting interviews. The participants agreed to being interviewed and having their interview audio-taped. All interviews involved the researcher asking questions from the designated interview protocol tool in a semi-structured format. The interviews were audio-taped by the researcher and then transcribed by a professional transcriptionist.

A conceptual thematic analysis of the interview data was developed. Two doctoral-prepared qualitative researchers were consulted to review the transcripts and they provided their proposed thematic analysis. Their analysis was compared to the researcher’s thematic analysis to ensure legitimacy and accuracy of the researcher’s study findings and interpretations.

**Results**

In the analysis of the data, six distinct belief systems and five personal and professional values
emerged. The six belief systems of the nurse educators and administrators in this study that emerged from the data collected were:

- Health care is really changing.
- Nursing curriculum needs to change.
- Nursing care begins in the community.
- Nursing continues to be a growing and emerging profession.
- The BSN degree needs to be the entry level degree for nursing practice.
- The motivation for being a nurse is to help others.

The values shared among these nurse educators and administrators were focused on components of standards of nursing practice that they considered essential in providing nursing care and being a member of the nursing profession. The five values of nurse educators and administrators in this study that emerged from the individual interviews were:

- Professionalism.
- Compassionate care.
- Collaborative/Partnership practice.
- Community service.
- Honesty, integrity, and credibility.

Within the transcripts, change, conflict, and challenge emerged from the data as the major themes. However, it is change that prevailed as the overarching theme throughout the interviews, threaded through every participant’s responses.

**Research Question 1:**

During the singular interviews of nurse educators and administrators, all nineteen study participants believed that community is where nursing practice and health care delivery is and will be occurring. Nurse educators from both UBS 1 and 2 voiced the need for students, as well as all health care practitioners, including themselves, to learn about the people to whom they provide health care. There is a need for nurses to learn and understand how people view health, illness, and death, and how they view it through their religions, cultures, and rituals.

Another affirmation supporting the belief in community and societal changes impacting nursing and nursing care can be seen in the commitment among the study participants that the nursing curriculum needs to change. The crux of baccalaureate curriculum change is for students to learn about the people they care for in the hospital, where they came from and where they return. This was clearly evident in the following statement voiced by a nurse educator from UBS 1

“I believe all nursing is public health nursing. I think we need to get out of the hospital. The trend of what’s happening and will continue to happen through the coming years is out of the hospital and into the community.”

The nurse educators interviewed in this study expressed the need for baccalaureate nursing students to perform community service.

All persons interviewed believed in the need for a BSN degree as the basic entry level for nursing practice, regardless of the area in which nursing is practiced. Finally, one of the strongest beliefs and convictions among all the educators and administrators in this study was expressed by the following interviewee. This nurse administrator and educator from UBS 2 stated, “We have the ability to change nursing to what it should be.”

As a nurse educator from UBS 2 points out, “What should be more important is that students learn what professional nursing means. And, not just as it relates to patient care, but to the unit, the health care institution, the community, and to the nursing profession itself.” The administrator and educator from UBS 2 further concluded that, “We are not teaching skills for a job, but a profession, which incorporates knowledge, skills, compassion, ethics, and professionalism.”

**Research Question 2:**

The second research question for this study was designed to determine how the belief systems and values of baccalaureate nurse educators and administrators reflect the paradigm shift in health care delivery and nursing practice for the 21st century. Many of the nurse educators addressed the growth in nursing science. Today, nursing research, evidence-based practice, advancements in technology and pharmacology, and a changing
preparing baccalaureate nursing curriculum. As one nurse educator from UBS 2 noted, the changes and challenges to teaching nursing include how the information will be conveyed to students reflecting the move to “a classroom of discourse (student involvement in their own learning) rather than a classroom of power points or lecture.”

For many of the study participants, technology was not part of their initial nursing education or even part of their graduate and continuing education. In fact, for some, technology was not part of their nursing practice. However, for all those interviewed, technology is now an integral part of their roles as nurse educators, administrators, clinical faculty, and practitioners. The majority of nurse educators interviewed believe that nursing students need to be shown, as explained by one nurse educator from UBS 1, “how to do a holistic approach to patient care by approaching the client not as an individual but as a member of the family and community and greater society.” The study participants stressed “students have to be prepared to go out to the community because this is where the patient care is going to be.”

Finally, it is the belief systems and values shared by an administrator from UBS 1 that epitomizes how the belief systems and values of those interviewed reflect the paradigm shift in health care and nursing practice as she states:

"Money’s not following where the need is and that has been a historical issue. There is a constant increase in the use of emergency departments as primary care providers for urban residents who are overwhelmingly minority. I’ve also seen a decrease in acute care hospitals and with a shift toward the demand for more and better care in families at a community and public level. But I have not seen a comparable corollary increase of reimbursement for the delivery of wellness services, lifestyle management, change in behaviors, etc., or services to follow where the needs go. Reimbursement still goes to acute care with other areas still struggling to manage how to keep people well. And so there’s an increasing gap between the dollars going to acute care when the health care needs are moved much more towards the push to eliminate smoking, decrease obesity levels, manage sexually transmitted diseases, HIV, of all those things. We’re living in a modernist health care environment, but the real world is living in a post-modern environment, and health care has not caught up to the post modern people.”

Research Question 3:

The third research question for this study was to determine how the belief systems and values of baccalaureate nurse educators and administrators are reflected in their teaching and administrative duties in relationship to preparing baccalaureate nursing students for C/PHN. Many felt comfortable sharing their belief systems and values with their students as part of their curriculum and clinical rotations due to their experiences overcoming numerous challenges and obstacles throughout their career. The importance of ethics as a personal and professional value and belief was a unifying bond among all 19 study participants.

A study participant, who is both an administrator and an educator from UBS 2, believes that students need to learn how to take “…those basic concepts of patient care, patient education, and health promotion, and help adjust that framework (of nursing practice) from an inpatient setting to a home setting.”

The educator with a dual administrative role in UBS 1 echoes a belief and value of many of the study participants that “patients are people first, whether you are looking at a client as a population or the client as an individual, they’re still people first and you have to take that perspective.” She, as do many of her colleagues, reflect this belief in their teaching by first role modeling this belief as a behavioral response in their interactions with students. The educators interviewed stressed they do this by treating students as people who have lives, families, and jobs outside the school setting that can and often do impact their ability to be students. The intent is that the students will then assimilate this behavior and belief and interact with patients and the community likewise.

Research Question 4:

The fourth and final research question for this study was to determine how baccalaureate nurse educators and administrators believe they incorporate the values of C/PHN in their baccalaureate nursing curriculum. A nurse educator from UBS 2, when asked if she is promoting C/PHN in her courses responded by saying:

“I think so because the other thing I do is I’m a SNAP (Student Nurses Association of PA) advisor and we do a lot of community pieces. But the other thing I always try and emphasize to students is it doesn’t matter what you do for the patient in the hospital, if you send
them back home in their community and they’re not able to care for themselves or meet their health needs, they’ll be right back in. So it’s very important that we follow through, whether it’s their discharge planning, or whatever. We also do a lot for health promotion in the community with health fairs and screenings and we work with children in community homes."

When an administrator at UBS 1 was asked if she promotes C/PHN in the nursing curriculum she confidently reveals:

“We promote it (community/public health nursing) so much more than any other nursing school. Our work here has been modeled after the National Innovative Model set forth by AHRQ (Agency for Healthcare Research and Quality) which garnered more than twenty million dollars of external funding. We have a living model in our nursing run public health clinic. We have a national leader in public health, a Robert Wood Johnson Fellow. We have put our money towards promoting primary prevention, primary care, and community based settings driven by the community needs.”

Thematic Analysis:

The nurse educators and administrators articulate a conflict between the changes that are occurring in nursing and health care and the continual quest for a respected identity as a practice and profession. One of the most prominent changes in nursing education and practice identified by the study participants deals with the increasing prevalence of technology in the classroom and clinical setting and the demand for evidence-based practice which seems to them a clear step forward for nursing. Those interviewed also discussed that the health care demands of the 21st century require nursing to focus on lifelong wellness and prevention of disease in the home and in the community which they say some of their students see as a step backward.

Beliefs and values of the baccalaureate nurse educators and administrators interviewed in this study, can be categorized into five sub-themes as they relate to the three overarching themes of change, conflict, and challenge. Sub-themes are:

- Nursing Education.
- Community.

Nursing (Practice and the Profession):

An unexpected response to the research questions, in light of the fact that the majority of study participants were initially diploma or associate degree prepared nurses, was the strongly and repeatedly emphasized belief of all those interviewed that a bachelor’s degree in nursing has to be the minimum entry level for nursing practice. Each participant had their own reservations regarding the BSN program in its current format and its and their ability to prepare nurses for the new model of health care practice in the 21st century.

A nurse educator from UBS 1 identified that “technology is totally different for nurses and nursing education.” She stated:

“I think one downside of technology is that students and probably practicing nurses tend to rely heavily on the technology and therefore, may not use their own senses as much as they might have in the past as far as physical assessments and really listening to the patient and asking the right questions. They may just be looking at the machinery.”

Many of the study participants reflected on the change in nursing practice from when they first became a nurse and throughout their nursing practice until this point in their nursing career. A cultural movement over the years has led to an evolution of nursing whose practice is evidence-based, collaborative, and autonomous. To do this, the participants believe a basic entry-level into nursing practice, the BSN degree, must be agreed upon.

Baccalaureate curriculum:

Technology and simulation are integral to student learning in the 21st century. All those in the study voiced similar comments that technology has its place in accessing information and in assisting in providing and improving patient care. However, the concern that was expressed by all study participants is their lack of expertise in technology, how and what technology should and needs to be incorporated in the curriculum, and the challenge of ensuring that the focus for the students does not become more about technology than caring for people.
All those interviewed unknowingly shared a belief that student learning no longer is the sole responsibility of the educators. Today, nursing education, as one nurse educator from UBS 2 stated, “...must involve active student learning; student centered learning with a greater emphasis on the student taking responsibility for their learning.”

At UBS 2, the belief systems and values of the nurse educators and administrators were rooted in community and public health. The baccalaureate curriculum integrates community concepts and clinical experiences throughout the entire two year upper level division and the one year accelerated BSN course work. However, all educators and administrators interviewed from UBS 2 voiced that this community integrated curriculum is not a flawless design. They shared concerns that community concepts and community clinical experiences need to be bolstered throughout the curriculum and in each individual course.

In UBS 1, the nurse educators and administrators interviewed shared similar strong beliefs and values regarding the significance of a community health nursing concepts and community clinical integrated curriculum. However, they believed it needs to be in addition to the traditional baccalaureate curriculum that includes a formal community health nursing theory course and a community health nursing clinical course.

Finally, it became evident during the interviews that all supported the need to provide opportunities within the baccalaureate nursing curriculum for positive transformation of students related to community service, their understanding of the community, and their responsibilities in caring for people.

Baccalaureate nursing students:

During the interviews focused on the challenges of the students entering the nursing profession and the reasons for them entering the profession, the nurse educators and administrators in this study lamented, as did a nurse administrator from UBS 2, that “many of our students are known as being much more self-serving in their orientation so it becomes a challenge to foster a culture of helping others. The motivation for being a nurse is to help others.”

One of the primary concerns of those interviewed related to the change in attitude of nursing students towards nursing and patients. The study participants, as did one nurse administrator from UBS 1, referred to an attitude change among nursing students noting

“...a change from choosing to be a nurse because you want to help others to choosing nursing because it is a secure and stable job that pays well in an unstable economy, choosing areas of practice that distance the nurse from the patient with minimal direct patient contact or care as opposed to choosing areas of practice that involve direct patient care and contact.”

Nursing education:

Attention in the media and in this study has been given to the nursing shortage and how the profession, health care, and society can address this national and global issue. Those interviewed addressed the fact that the preparation of nurses into practice is varied, diverse, and being accomplished in a shorter and quicker period of time. Other challenges that emerged during the study related to nursing education were: increase in the number of students in the classroom, increase emphasis on technology, and the increased prevalence of cheating and plagiarism. Many of the nurse educators interviewed from both UBS 1 and UBS 2 addressed the fast tracked approach to educating nurses by presenting their observations of how students obtain nursing knowledge. As a result, as one nurse administrator from UBS 2 stated:

“The size of nursing textbooks have enlarged in response to the increased knowledge in nursing and health care. There is increased information students need to know yet there is a decrease in the available time in the classroom and out in clinical which continues to be decreased each year it seems and a decrease in available space in the curriculum to master this knowledge. So the solution to this has been and continues to be add-on content to an already overburdened curriculum and to place materials not covered in class on the online course board and in learning modules.”

As perceived by the study participants, despite advancements in nursing, the profession continues to respond to publicized shortages through traditional approaches such as lowering educational learning time frames and add-on curriculum that must be processed in a shorter period of time.

Community:

All of the study participants had expressed
similar responses to that of a nurse educator from UBS 1 who stated that “Nursing care begins in the community.” The community clinical rotation is, “…how a nurse uses that cultural sensitivity in relation to patient care.” Another belief of a nurse educator at UBS 2 is that despite the integration of community concepts throughout the curriculum, “not enough emphasis is placed towards population health issues and family issues or on health promotion and disease prevention. Patient adherence is no longer a dictate from health experts; it is a collaborative partnership with the patient and the community.”

The study participants made it very clear that there has been, and is, an urgency related to the fact that they see that health care is really changing and that health care is moving towards out-of-hospital experiences. They all voiced that it is no longer all about taking care of sick people, but rather, about helping people to take care of themselves. The recognition that society and the world are changing their ideas about health and healthy lifestyles and, as noted by one nurse educator from UBS 1, that “the only way to seriously impact the health of the general population is prevention” were two beliefs articulated by many of the participants that provided additional rationale for urgent change in how nursing students are to be prepared for practice in the 21st century.

Obstacles facing UBS 2 have been many despite their vision to incorporate community concepts and community clinical opportunities throughout the curriculum. One of the most significant of these obstacles is the fact that the coalition or nursing leadership team originally created to develop this new curriculum proposal are no longer employed by the school of nursing. There also seemed to be a considerable gap in plausibility regarding the reality that community was being taught in every course by every nurse educator throughout the baccalaureate nursing curriculum. This belief was shared by many participants not just at UBS 2, but also at UBS 1 where they have the traditional community course and community clinical (but have recently adopted the non-traditional community integrated concepts and community clinical curriculum approach to preparing baccalaureate nurses for C/PHN).

Many of the nurse educators identified a belief similar to that voiced by a nurse educator in UBS 2:

“The problem with the concept of integrating a particular topic like community, geriatrics, etc. throughout the courses in the curriculum is that it often falls through the cracks-everyone assumes everyone else has it in their course and what we later learn is it isn’t in any course, though we are working hard to make sure that no longer happens.”

Though the obstacle was clearly presented by some participants and thinly veiled by others, the obstacle to sharing the vision of change was the same and two-fold. The first aspect of the obstacle to sharing the vision of change in the paradigm shift in health care delivery is a lack of clinical and educational expertise in the area of C/PHN. The second aspect of this obstacle is the fact that these nurse educators and administrators have been and still are a part of an academic curriculum and university center with economic and powerful decision-making affiliations with a major acute care hospital health system. As the dean of UBS 2 denounced:

“I think we continue to live in this nursing education world in which the hospital predominates. And when the hospital predominates, then rules, procedures, obedience, subservience, those cultural norms continue to be conveyed in our education. We still spend a lot of time talking about following doctor’s orders. We haven’t shifted the focus of our nursing education programs to rest on the patient. We still have it resting on the tasks that need to be done to ensure that orders are met, and that issue, I’m passionate about. It is incumbent on us to begin to disconnect the almost exclusive relationship that baccalaureate nursing programs have with acute care hospitals! But if you have 75-90% of your curriculum in a hospital, we are not preparing baccalaureate people to be able to think outside the box of hospital care. Health care is moving towards out of hospital experiences….we cannot continue to place students almost exclusively for their clinical experiences in acute care hospitals. That’s not where the action is and it’s certainly not where the action will be in the imminent future.”

An additional obstacle to nurse educators in both schools of nursing was identified by one nurse educator who also had administrative duties from UBS 1. She stated, “There are pockets where you find there is resistance and more of a proprietary mode.” Another obstacle was the economy and its role in limiting available and needed resources. Repeatedly, the study participants cited that their workload was becoming increasingly challenging. All recognized the nursing shortage and need to prepare more nurses. They also voiced that to remain fiscally viable, student enrollment was the number one source of revenue for their academic institu-
tion. However, due to the economy, nurse educators were expected to take on more students, take on more work associated with preparing those students for the changes in nursing and health care delivery, and do it in the same amount of time as before with less available resources.

Both urban university baccalaureate nursing schools in this study and their respective nurse educators and administrators have demonstrated a commitment to change in nursing curriculum and the organizational/educational culture of preparing baccalaureate nursing students for C/PHN.

Discussion:

In this qualitative phenomenological research study, nineteen nurse educators and administrators from two urban university baccalaureate schools of nursing (UBS 1 and UBS 2) were interviewed about their belief systems and values regarding their preparation of baccalaureate nursing students for Community/public health nursing. Community integrated curriculum in pre-licensure university baccalaureate schools of nursing is in its infancy. Every study participant valued their commitment to people, to nursing, to the community, to readying the next generation of professional health care providers, and to preparing professional community committed nurses for practice in the 21st century.

These participants discussed their concerns regarding the change from when they entered nursing, practiced nursing, and even when they began teaching nursing, where the focus was on a desire to help those in need. Despite the belief systems of the study participants, their students want their initiation into nursing practice to be in critical care units in the hospital. As one nurse educator from UBS 1 states, “The myth still exists that community and public health nursing is not really nursing.” Therefore, UBS 1 believed there is a need to incorporate a community integrated curriculum, in addition to maintaining the community theory and clinical courses offered at the end of the nursing program. The nurse educators and administrators from UBS 2 also made similar observations about students and their disinterest in community nursing. Their solution was to eliminate the community nursing and clinical courses and to rely solely on the integration of community concepts and clinical opportunities throughout the curriculum.

The conflict, however, is that the nurse educators and administrators from both UBS 1 and UBS 2 readily admit that they believe when something is integrated, it has a tendency to get lost. The majority of the nurse educators interviewed had reticence about integrating community and public health nursing in the curriculum because no template exists for integrating C/PHN throughout the curriculum.

Finally, these nurse educators and administrators value the need for BSN students and practicing RNs to demonstrate an understanding, appreciation, and acceptance of the relationship of nursing practice and patient care to health prevention, screenings, and patient education and a collaboration and partnership with other health care providers and the community. All study participants valued and believed in the need for incorporating C/PHN into the curriculum. They also valued and believed that they were actively and will continue to actively incorporate C/PHN into their respective BSN curriculum. However, all individually reconciled that an uncertainty exists as to the reality of what, how much, how effective, and/or how accurately C/PHN was being incorporated when currently no objective evidence exists to support their beliefs.

All those in the study believed that nursing curriculum needs to change. Some of the study participants believed that when a curriculum offers just one community theory and one community clinical course (and not until the final semester of the nursing program), the student fails to see how community relates to any other aspect of nursing practice, particularly hospital based care (where the majority of their clinical nursing rotations occurs). Thus, in their opinion, community needs to be integrated throughout the curriculum. However, many (including those nurse educators in both UBS 1 and 2 who have community expertise) suggested that though integration of community concepts seems to be the most logical alternative to this dilemma, they believe when a topic that needs attention in the curriculum is designated for integration it “usually ends up getting dropped or slipping through the cracks.”

The Institute of Medicine (IOM, 2010) reports a high turn-over rate for new nurses and sees residency programs as a solution for solidification of practice skills and employment retention in hospital and Community/public health settings. However, this approach
is still not addressing the inequities of nursing education in preparing professionals capable of meeting the complicated health care needs of patients. In response, the IOM identified requisite competencies that nurses need to acquire prior to practice to deliver safe and quality care to all patients in all practice settings. They suggested that nursing curriculum include competencies in “....leadership, health policy, system improvement, research and evidence-based practice, and teamwork and collaboration, as well as competency in specific content area including community and public health and geriatrics” (IOM, 2010).

Leading the list of concerns of the study participants related to the BSN students was the fact that, for the most part, students entering their nursing programs were doing so because of the economy and the need for job stability in an unstable economic environment. The new motivation to become a nurse, to earn an income, versus the past motivation to become a nurse, to care for others, was quite troublesome to those in the study. Another issue the study participants found with the nursing students was the students’ inability to be present both in the classroom and with their patients in their clinical rotations.

All study participants remarked about the growing student enrollment with upwards of 150 students per pre-licensure program. Each participant shared their ethical dilemma in preparing that number of students adequately for a lifelong commitment to the profession of nursing and caring for others.

Other areas impacting nursing education as noted by the study participants included the acknowledged fact that there are technology deficits among the nurse educators and administrators. They all also expressed that they are continuing to improve their level of comfort and expertise in technology use as a way to engage students in the learning process.

Patient adherence is no longer a dictate from health experts but a collaborative partnership with the patient and the community. The community, nationally and globally, is changing its ideas of health and healthy lifestyles. The promotion of health, prevention of disease, and the self-management of chronic illness and health is the new model of health and health care. As one participant stressed, “It is no longer about taking care of sick people; it is about helping people learn how to care for themselves by looking at health care through the lens of the person needing the care.”

The study participants expressed concern related to the bureaucratic, political, and economic culture of their affiliated hospitals that oftentimes impedes their ability to make changes in preparing nurses for C/PHN while their hospitals remain entrenched in the medical model focused on pathology and acute care. The study participants believe this hospital infrastructure and mode of health care practice influences the career choices of their BSN students resulting in a disregard for C/PHN as a significant direction and foundation of health care delivery and nursing practice. This, coupled with the rapid advancement of technology, the expressed concerns about the inexperience of nurse educators related to incorporating technology to enhance student learning (what to use, how to use it, when to use it), and the voiced inexperience of teaching C/PHN concepts and practices, serve as obstacles to consolidating change among the study participants and the nursing profession.

Finally, in the evaluation of the study findings it became apparent that change has been and is continuing to occur in both schools of nursing. However, these changes have been and are continuing to occur without evidence-based studies to support if the changes were needed, what changes should be implemented, outcomes desired and if those outcomes were achieved. No studies have been performed to determine what, if any, effect the curricular changes and belief systems and values of those proposing and/or implementing these changes have on their BSN students who are expected to practice nursing from a C/PHN perspective while being nursing students and then as a graduate and practicing RN. Thus, as the nurse educators and administrators of this study have concluded, change continues to occur, but in reality, nothing has significantly changed with regard to nursing and its historical approach to making major change in both the practice and the profession.

Conclusions:

This study examined the belief systems and values of nurse educators and administrators in preparing baccalaureate nursing students for C/PHN and how those belief systems and values reflect the paradigm shift in health care delivery and practice. Articulated in the direction each nurse administrator and their nurse educators proposed for curriculum and program development was the belief in the paradigm change in health care delivery and the need for baccalaureate educated nurses to be prepared to function from a C/PHN perspective.
All study participants noted that the RN student needs to be able to articulate C/PHN, but there still exists the question as to what level this should occur. There are three curricular approaches to preparing BSN students for C/PHN: (a) community theory and community clinical as two separate stand alone courses offered towards the end of the BSN program, (b) community concepts and community clinical integrated curriculum, or (c) a combined approach that offers a community theory and community clinical course offered towards the end of the BSN program in addition to integrating community concepts and community clinical throughout the curriculum. Study results revealed that none of the study participants in either UBS 1 or UBS 2 know exactly how to make the changes in their curriculum to address the paradigm shift in health care, but all believe they need to do it and all were supportive of the need to change. Determining which if any, is the best approach to preparing baccalaureate nursing students for C/PHN practice needs to be further researched.

Another direction for future research would be to consider surveying students before and after completing a community didactic and community clinical course to determine what, if any, effect these courses had on baccalaureate nursing students’ understanding of the new model of health care and C/PHN practice and/or their career choice.

References:


All study participants noted that the RN student needs to be able to articulate C/PHN, but there still exists the question as to what level this should occur. There are three curricular approaches to preparing BSN students for C/PHN: (a) community theory and community clinical as two separate stand alone courses offered towards the end of the BSN program, (b) community concepts and community clinical integrated curriculum, or (c) a combined approach that offers a community theory and community clinical course offered towards the end of the BSN program in addition to integrating community concepts and community clinical throughout the curriculum. Study results revealed that none of the study participants in either UBS 1 or UBS 2 know exactly how to make the changes in their curriculum to address the paradigm shift in health care, but all believe they need to do it and all were supportive of the need to change. Determining which if any, is the best approach to preparing baccalaureate nursing students for C/PHN practice needs to be further researched.

Another direction for future research would be to consider surveying students before and after completing a community didactic and community clinical course to determine what, if any, effect these courses had on baccalaureate nursing students’ understanding of the new model of health care and C/PHN practice and/or their career choice.

References:


Bouchaud MT et.al | Preparing Baccalaureate Nursing Students for Community/Public Health Nursing: Nurse Educators and Administrators Perception


Do family factors and gender influence violent behaviour in Thai adolescents?: A cross-sectional study

Wongchum R*, Ramjeet J

a McCormick Faculty of Nursing, Payap University, Chiang Mai, Thailand .
b School of Nursing Sciences, Faculty of Medicine and Health Sciences, University of East Anglia, UK

ABSTRACT

Background: Adolescent violence is one of the key social problems in Thailand. WHO (2002) has identified Thailand as 8th (out of 73 countries) in the number of murders committed by adolescents. A review of the literature found that one important factor may be the family environment. However, there is little evidence identifying relevant family characteristics in Thailand. Therefore, to prevent violent behaviour in Thai adolescents, relevant professionals need a better understanding of the family factors that influence the use of violence. Objective: To identify risk and protective factors associated with the family that may influence violent behaviour in Thai adolescents and examine the role of gender.

Methods: This study was conducted among adolescents aged 15-18 years. Validated self-report questionnaires were used to collect data and t-tests, correlation, and multiple regressions were used to examine the relationships between variables.

Results: Males reported significantly more physical fights than females, whereas the females reported using significantly more verbal bullying than the male adolescents. The findings revealed that positive parenting practice, family relationship characteristics, and parent child attachment were negatively correlated (protective) and reduced the violent behaviour. A close relationship between parent and child and high family income were identified as protective factors whereas father’s with a master degree was identified as a risk factor for violence in adolescents.

Conclusion: Results suggest that males used more physical violence but females used more verbal bullying. Adolescents who receive practical support from their parents, and have a close relationship with their family were less likely to report violent behaviour. Therefore, positive parenting practice, family relationships and parent-child attachment could be strengthened and gender differences should be considered in the prevention of adolescent violence

Keywords: Violence; violent behaviour; adolescents; family factors; gender.
Introduction

Adolescence, the period of life between 10 and 19 years (WHO, 2010), is a time of rapid growth and development that encompasses the physical, emotional, and social dimensions. During this period, adolescents go through many physical, psychological, and social changes (Marcus, 2007). Adapting to these can cause stress, feelings of negativity, and anger because of perceived and actual failures (Satcher, 2009). Many longitudinal studies have shown that developmental changes can lead to violence in adolescence and early adulthood (Statin & Magnusson, 1989, Pulkkinen, 1987, Felson, 1992). Therefore, the emotional and physical changes experienced contribute to the turbulence of the adolescent period compared to earlier stages of development.

Violence is defined by WHO as ‘the intentional use of physical force or power, threatened or actual, against oneself, another person, or against a group or community, that either results in or has a high likelihood of resulting in injury, death, psychological harm, mal-development, or deprivation’ (Krug, Dahlberg, & Mercy et al., 2002). In this study, the definition of violence by WHO was used to delineate violent behaviour, and adolescent violence specifically includes ‘aggressive behaviour (verbal and physical against others), such as bullying, slapping, hitting, or fighting, and delinquent behaviour, such as robbery and damage to property of others’ (Page & Page, 2011). This study focuses only on interpersonal violence (verbal and physical) and does not include self-harm.

Adolescent violence is one of the key social problems in Thailand. WHO (2002) identified Thailand as 8th (out of 73 countries) in the number of murders committed by youths. Official criminal records (Thai National Statistical Office (NSO), 2004) show that there has been a marked increase in the number of violent adolescent criminals in Thailand. A report by the Department of Juvenile Observation and Protection (Department of Juvenile Observation and Protection, 2008) identified the number of cases handled by all juvenile observation and protection centres increased from 36,080 in 2005 to 51,128 in 2007. Most offences involved violent behaviour. This concurs with the data from a national survey which showed that over 30 % of Thai children and adolescents have behaved violently, particularly physical fights, theft, and destroying public property (Prasert & Phetdee, 2009). Furthermore, Youth Risk Behaviour Survey of Thai Youths in Bangkok conducted by Ruangkanchanasetr et al. (2005) reported that one third of participants had been involved in at least one violent event, 14% of participants had been physically assaulted and 8.5% carried a weapon to school. In 2008, a national survey of students in high school (Child Watch, 2009) found that 13-18 % of students have been physically assaulted by friends and 21-29% of students carried a weapon to school. Recently, the Department of Mental Health (2010) showed that nearly one third of Thai children and adolescents have experienced physical aggression.

An extensive review of the literature, including from Thailand, identified that family factors were associated with violent behaviours in adolescents (Ruangkanchanasetr et al., 2005; Chantapreda, Thanwattanakul, Sawangjaroen, et al., 2003; Laeheem, Kuning, & McNeil, 2009; Isaranurug, Aeowattana, & Chansatiporn, et al., 2001). Family factors, including poor parental relationships, marital breakdown (Ruangkanchanasetr et al., 2005), poverty, exposure to violence in the family (Laeheem, Kuning, & McNeil, 2009), inadequate parental response to violence (Chantapreda, et al., 2003), and low levels of family bonding (Rodniam, 2007) have been associated with an increased likelihood of violence. On the other hand, higher parental education, an intact family, and higher family income were found to be associated with reduced risk of engaging in physical violence (Isaranurug, et al., 2001; Pradubmook-Sherer, 2009). Moreover, a study by Shetgiri, Kataoka, Ponce, et al (2010) reported that the male gender was associated with a higher incidence of violence among American participants.

The Thai government has national policies, targets, and lead agencies to prevent and control violence among children and adolescents (WHO, 2007). However, violent behaviour in adolescents is still a serious problem in Thai society.

In conclusion, it seems that adolescent violence results from a complex interplay of family factors that may have an influence from early childhood to adolescence. Violence in adolescents may be decreased or prevented if the factors influencing violent behaviour are significantly reduced or eliminated (Dahlberg & Krug, 2002) and protective factors are promoted. Most research undertaken in Thailand has examined risk behaviour in adolescents and there is little evidence identifying family factors. Therefore, this study examined family factors in relation to violent behaviour in adolescents.
Aim

To identify risk and protective factors associated with the family that influence violent behaviour in adolescents and examine the role of gender.

Method

Design and settings:

This study was a cross-sectional study carried out in Thailand among Thai adolescents from October 2012 to December 2012.

Sample size and method:

A representative sample of 400 adolescents from two schools was identified: 200 students in a public technical college and 200 students in a public high school in Chiang Mai, Thailand. They were recruited from grade 10-12 (15-18 years) in the high school and years 1-3 of diploma level (15-18 years) in the technical college. The age range of 15-18 years was selected as this is when there is the highest risk of involvement in violent behaviour.

Measurements:

There were 5 components, including demographic data, positive parenting practices, such as parental rewards for good behaviour, family relationship characteristics, such as relationships between parents and children, parent-child attachment, including the degree of warmth in the parent-child relationship, and violent behaviour, including the self-report delinquency and the aggression questionnaire. Five validated questionnaires were used following permission from the Centers for Disease Control and Prevention (CDC) in the U.S.A. They included the positive parenting practices questionnaire, the family relationship characteristics questionnaire, the parent-child attachment questionnaire, the modified aggression questionnaire, and the self report delinquency questionnaire.

Translation issues:

The recommendations of Maneesriwongul & Dixon (2004) review were used. Firstly the questionnaires were translated into Thai by the first author and then checked by a nurse translator who is familiar with spoken English. Then, the questionnaires were back-translated into English by a nurse who is familiar with English-speaking culture. Then, the second version was compared to the original by an expert who is English and also knowledgeable of Thai culture. Finally, 30 adolescent volunteers were used to test the translated instrument. The consistency of the responses regarding the meaning of context and the language, and the time taken during the piloting were used to develop the final version of the questionnaires.

Reliability of questionnaires:

The questionnaires were tested for internal consistency by using Cronbach’s alpha coefficient of rating scale. The results of the internal consistency of the questionnaires demonstrated a range of acceptable scores (approximately .7 or higher).

Ethical issues:

The study was approved by the Faculty of Health Research Ethics Committee, University of East Anglia, UK, and gatekeeper permission from the two schools in Thailand was given. An information sheet and consent form was offered to persons who expressed interest before making decision to take part of this study. The participants also had to return the written consent form with their parent’s signatures (age of consent is 20 years in Thailand). The participants were assured that confidentiality at all times through the use of a number or a pseudonym.

Data collection:

The participants were invited to complete the questionnaires and data collection took place in the high school and the technical college during break time. The participants were given 25-30 minutes to complete the questionnaires which were administered by the first author (RW).

Statistical analysis:

All analyses were conducted using SPSS version 16.0. T-tests, correlation analyses, and multiple regression analyses were used to examine the relationship between the variables and to identify predictors of violent behaviour and gender differences.

Results

Sample characteristics:

Of the 400 participants, 67% of adolescents were male and 33% were female, and the mean age was 16.8 years.
Most participants (68%) lived with both parents, 14% lived with their mother only, whereas 6% lived with their father only, and approximately 1% lived alone in accommodation. The majority of participants (73%) reported that their parents were married and living with their spouse. One third of the fathers (33%) graduated with a first degree or higher, whereas one third of the mothers (35%) attended primary school only. Only 1% of participants indicated that they did not know their parents' educational level. Nearly one third of participants (32%) reported that their families earned approximately 10,001-20,000 baht per month (approximately $333-$666) (comfortable income).

Gender differences in violence and parenting

The males reported having significantly more physical fights than the females, whereas the females reported using significantly more verbal bullying than the male adolescents. However, the male adolescents were significantly more likely to behave violently than the female adolescents (as shown in Table 1).

| Table 1. T-test results of violent behaviour by gender (n=400) |
|---|---|---|---|
| Gender | N  | Mean | SD  | t-test | Sig  |
| Male    | 269 | 55.17 | 6.72 | 3.88   | <0.001 |
| Female  | 131 | 52.51 | 5.84 |        |       |

The results demonstrated that female adolescents reported more positive parenting practices than the male adolescents, including winks, smiles, hugs or kisses (non-verbal affirmation), doing something special together, and getting tangible rewards. However, the male adolescents reported getting more positive comments (verbal affirmation) than female adolescents. Female adolescents also reported overall more positive family relationship characteristics, including cohesive relationships, faith in family judgements, and positive experiences with the family. Additionally, female adolescents reported a higher mean level of attachment than male adolescents.

Correlations and multiple regressions

Correlational analyses was undertaken to investigate the relationship between family factors and violent behaviour. The findings were that positive parenting practice, family relationship characteristics and parent-child attachment were negatively correlated with violent behaviour (as shown in Table 2). This meant that adolescents who reported high positive parenting practices, positive family relationship characteristics, and positive attachment with their parents were significantly less likely to behave violently.

| Table 2. Pearson Correlation analyses results showing the relationship between family factors and violent behaviour. (n=400) |
|---|---|---|
| Family factors | R  | Sig  |
| Positive parenting practices | -.156** | <0.001 |
| Family relationship characteristics | -.356** | <0.001 |
| Parent-child attachment | -.274** | <0.001 |

Finally, in order to identify predictors of violent behaviour, the results from multiple regression analyses identified three variables, namely family relationship characteristics, high family income (>50,000 baht (approximately $1,666) per month), and fathers with a master degree, predicted the use of violence in adolescents (as shown in Table 3). Specifically, positive family relationship characteristics and family income > 50,000 baht per month (approximately $1,666) were identified as protective factors whereas father’s with a master’s degree was identified as a risk factor.

Discussion

The results of the study demonstrated that the male adolescents are significantly more likely to report behaving violently than the female adolescents. This result is consistent with a cross sectional study in Thailand by Sherer and Sherer (2011) who found that Thai male adolescents were more violent than females and this is similar to the findings from other countries. For example, a study by Shetgiri et al. (2010) found that the male gender was associated with a higher incidence of violence among American participants. Bacchini, Miranda, and Affuso (2011) demonstrated that male gender predicted a higher involvement in antisocial behaviour. Kim and Kim (2005) found that male adolescents were more likely to exhibit an antisocial personality, including violence. It can be concluded from the evidence that male adolescents are more likely to use violence.

Interestingly, the finding of the study also showed that the females used significantly more verbal
bullying than the male adolescents. This result is consistent with a western study (Wang, Iannotti, & Nansel, 2009) which found that girls were more involved in bullying. This could be because girls are expected to be non violent (Turkel, 2007) and parents try to discourage direct physical aggression in girls (Turkel, 2007) so they are not allowed to express their anger physically. As a result, they may use to express their negative emotions by verbal bullying. It seems that both male adolescents and female adolescents behave violently but they express it in different ways.

However, in this study, the female adolescents reported: being rewarded for good behaviour, increased positive relationships with the family, including cohesive relationships and attachment behaviour than the male adolescents. It seems that the females are more likely to experience close relationships and proximity to their family. This may help them to develop warm interpersonal relationships, and use less physical aggression. This is similar to a Spanish study by Garaigordobil, Maganto, & Pérez, et al. (2009) who found that female adolescents had significantly higher scores in pro-social cognitive and social behaviour. It can be concluded that the gender of the adolescent appears to affect the way that the parents respond to them and that close cohesive relationships with the family may help to prevent female adolescents from using physical violence.

It is interesting that the results obtained in this study emphasise the existence of gender differences in expressing violence. This may be because females learn to express their anger in convert ways and possibly demonstrates that gender differences relate to the expression of violence rather than the view that males are violent and females are not. There is a need to reflect on the types of parenting styles used with adolescents and the need to critically analyse the patterns of behaviour associated with gender that adolescents learn are needed.

The study findings were similar to studies in both western countries and Thailand (Rhucharoenpornpanich, Chamratrithirong, Fongkaw, et al., 2010; Aceves, Berkeley, 2007; Colman, Murray, Abbott, et al., 2009; Appleyard, Berlin, 2007) and confirmed that adolescents having a higher level of positive parenting practices, a healthy family relationship, and good parent-child attachment were less likely to behave violently. For example a study by Rhucharoenpornpanich et al. (2010) investigated parenting practices and delinquent behaviours among Thai adolescents and found that parents who raised their children using boundaries, such as setting rules, and supervising them, in adolescence were less likely to develop delinquent behaviours. A study by Isaranurug et al. (2001) found that Thai adolescents who reported high quality relationships with parents were less likely to engage in violent behaviour. In western studies, for example Aceves and Berkeley (2007), found that adolescents reporting positive relationships with parents were less likely to learn violence and Colman et al. (2009) suggested that good social support from the family can help protect adolescents against emotional and behavioural problems, including violence. Moreover, Appleyard and Berline (2007) found that children who had secure attachments with their parents are more likely to have appropriate interactions with others, to manage their emotions, and to have strong problem solving skills which means they can resolve issues without using violence.

Additionally, the results from multiple regression analyses showed that adolescents who have a close relationship with their parents and live in a high income family are less likely to behave violently and so these factors were protective. These findings are similar to studies by Pradubmook-Sherer (2009) and Isaranurug et al. (2001). According to Bradley and Corwyn’s study (2002) findings, a higher income is associated with mature cognitive and emotional development in children.

### Table 3. Regression model for predicting violent behaviour (n=400)

<table>
<thead>
<tr>
<th>Variables</th>
<th>b</th>
<th>SE</th>
<th>p-value*</th>
<th>95% CI Lower</th>
<th>95% CI Upper</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family relationship characteristics</td>
<td>-.184</td>
<td>.026</td>
<td>.000</td>
<td>-.23</td>
<td>-.13</td>
</tr>
<tr>
<td>Income 50,000 baht per month</td>
<td>-2.990</td>
<td>1.12</td>
<td>.008</td>
<td>-5.18</td>
<td>-.78</td>
</tr>
<tr>
<td>Father with master degree</td>
<td>2.803</td>
<td>1.02</td>
<td>.006</td>
<td>.79</td>
<td>4.81</td>
</tr>
<tr>
<td>Interception</td>
<td>75.380</td>
<td>2.97</td>
<td>.000</td>
<td>69.54</td>
<td>81.22</td>
</tr>
</tbody>
</table>

b=regression coefficient, SE=Standard Error, *p ≤.01 significant (two-tailed) (using the stepwise method), CI=Confidence Interval, R²=.152, Adj. R²=.145, SEE=6.06, F=23.603, Sig F= 0.000, Durbin-Watson=1.755
This money may provide greater resources to cope with everyday stressors which then enable parents to interact more often and more positively with their children (Barnett, Brown, & Shore, 2004). The quality and stability of the relationships between parents and children may help to prevent children from using violence. These significant findings help to confirm the importance of family factors that influence violent behaviour in adolescents not only in western countries but also in Thailand.

Interestingly, the finding from the study showed that a father with a master’s degree was identified as a risk factor which means that adolescents were more likely to behave violently. The finding is in contrast to a study in Thailand in 2009 by Pradubmook-Sherer (2009) who found that children having higher parental education were less likely to engage in violent behaviour in adolescents. It could be because in Thailand, the notion of ‘saving face’, which is the way of thinking of Thai people to gain power and status within a group, is still a factor that influences adult behaviour (Persons, 2008). Therefore, parents may do anything to prevent loss of face in particularly in the highly educated family. Moreover, the Thai family is hierarchical with the father as the family leader. Thus, the father will set high expectations and pressurise his children to achieve his needs even when they may not be the child’s needs. The difference in views between the father and child may cause conflict and communication breakdown that is related to weakening the bond between the parent and the adolescent (Rodniam, 2007). A poor relationship with parents was related to violent behaviour in Thai adolescents (Ruangkanchanasetr, 2005) and consequently, adolescents may engage in violent behaviour. However, it is difficult to conclude clearly the relationship because of the cross-sectional design of this study and further longitudinal studies are needed to examine this relationship over time.

This study provides significant factors associated with the family, including parenting practices, family relationships, parent child attachment, family income, and gender differences influencing violent behaviour in adolescents which may help to inform the design of violence prevention programmes. However, a limitation of this study is the single locality of the sample (one province), so further studies could be undertaken in other parts of Thailand, that are more urban in order to encompass a wider social spectrum to confirm the identified factors influencing violent behaviour in adolescents.

**Conclusion:**

An overview of the study demonstrates that there are many factors, including family factors and gender that contribute to adolescent violence. A high family income and children receiving disciplined approach, and reporting a close relationship and good attachment to their parents are less likely to behave violently. Moreover, the findings of study show that males are more likely to use physical violence, whereas the females reported used significantly more verbal bullying. This means that school nurses could provide advice on how to manage both physical and verbal bullying with a view to highlighting possible gender differences in behaviour. Nurses/health visitors who work with babies and young families need to educate parents about the protective factors that help to prevent violence in children and also need to keep a careful eye on families where they perceive insecure attachments, difficult relationships and poor discipline. The results of the study have identified that many factors (but not all) influencing violence in adolescents in Thailand, are similar to other countries. Therefore, gender differences and specific family factors are identified and further longitudinal studies are needed to verify the relationships.

**Acknowledgements:**

We would like to express our gratitude to Payap University for supporting this research. We also want to thank the adolescents in the high school and technical college who participated in this study.

**References:**


Stattin, H., Magnusson, D. (1989). The role of early aggressive behaviour in the frequency, seriousness, and types of


