Capacity Building for Faculty Empowerment in Aligning Education with Practice of Nursing in 21st Century
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The objectives for this session are to -
i. Compare nursing scene of the West with that here in India
ii. Consider what changes are needed to train the "Nurse of the 21st Century"
iii. Consider "content overload" and some ways of curbing the "content tyranny"
iv. Discuss 'theory-practice gap' and methods to plug the gap

The IOM Report, "The Future of Nursing" released in 2010 has four key messages:
The report says that the "Nurses should
i)   practice to the full extent of education & training;
ii)   achieve higher levels of education & training through seamless academic progression,
iii) be full partners in redesigning health care, and
iv) do effective workforce planning through better data collection & information flow. These messages are meant for the USA but are equally applicable to India.

The IOM report also dwells on the role of Deans & Directors of Nursing: it says that they should
i)   Promote lifelong learning and academic progression;
ii) Partner with other Deans to launch educational collaborative initiatives,
iii) Develop strategies for flexible student-centered learning environments,
iv) Promote practice-integration into curriculum at all levels of education, and v) Support the Councils by participating in requested surveys to enable evidence-based policy making. These messages too are applicable to India.

Indian Nursing scene
Nursing in India - the deficit:
Acute shortage of nurses is mind boggling indeed. Of the 2.4 million nurses needed for optimum availability, there is a gross deficit of 2 million or >80% of the total needed. The nurse: population ratio in India is 1:2,500 and ten times less than the ration of 1:250 in the West. The nurse: doctor ratio is 0.5 nurse/doctor in India is also ten-times less when compared with 5 nurses/doctor in UK. One of the major reasons for such nursing shortages in South Asia, is the desire to avoid the "stigma associated with basic nursing tasks" forms a strong cultural backdrop (cited in http://www.biomedcentral.com/1472-6955/12/8)

Nursing in India - other issues:
i. Lack of clear career pathways and mechanisms for promotion
ii. In-service training to learn new skills is rare
iii. Pay is low, esp. in small private hospitals
iv. Working environment is often poor
v. Lack of sufficient staff, equipment & infra-structure, personal security
vi. Very high patient to nurse ratio (50 patients/nurse according to a survey in N-Delhi)

India: Nursing Education – 12-Key Issues:
i. Several Centres of Excellence in nursing education do exist in India; however, very little published data are available on their achivements.

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ii. Inadequate educational monitoring & governance

iii. Serious teaching staff shortages

iv. Poor physical infrastructure

v. Poor educational resources, esp for clinical skills

vi. Lack of continuing professional development for faculty members

vii. Lack of promotion opportunities for faculty

viii. Over-cluttered curriculum

ix. Reliance on didactic teaching approaches

x. Poor student living accommodation

xi. Poor links between clinical areas and educational institutions

xii. Inadequate clinical experiences

(cited in http://www.biomedcentral.com/1472-6955/12/8)

Status issues in Clinical Education is another area of concern. For students of BSc & MSc, the fact that most staff nurses are diploma-holders creates status ambiguities. Therefore, clinical education is seen as the responsibility of nursing faculty member and the Staff nurses often do not see it as their duty to support students' learning.

Equipment for teaching clinical procedures is not provided by the service staff.

If theory is taught without effective clinical correlation, the result is "Theory-Practice gap". Lack of resources, capacity and infrastructure also create a wide and deep theory-practice gap. Ultimately, the students learn about nursing assessments, care planning or clinical procedures that have no relationship to the real-life practice. This is reflected by the teaching staff at times telling their students, "You all Do as we Say; Don't do as we do."

The Future of Nursing

Education is through a Collaborative approach. We need constructive dialogue on how education and practice could work towards a win-win partnership.

Reforms in Nursing Education are clearly needed due to several factors:

Nursing profession is now Global & multi-cultural;

The new pedagogies in the info-tech-era, and adult learning (Andragogy, Heutagogy etc);

Preparing future professionals to push the healthcare-transformation agenda forward;

Call for 'student-friendly' Curricula;

To prepare "the nurse for the 21st Century".

Why do we need "a New Kind of Nurse"? There are several reasons for it. Some of the important ones are as follows.

I. Changing nursing practice environment:

    i. Increasing complexity & acuity

    ii. Quicker patient turn over (shorter-stay)

    iii. Shift of care to home & community

II. Exponential growth of knowledge

III. Explosion of technologies

IV. Identification of the "Quality Chasm" – to close the 'theory-practice gap'

V. Changing demographics:

    i. Aging population

    ii. Increased load of chronic illnesses

    iii. Families increasingly engaged in care-giving

VI. Nurse – a trainer of care-giver, not a provider of care

VII. Increased attention to health-promotion and public health initiatives (DOTS etc)

The New Nursing Curricula should have the following features:

- Emphasize deep understanding of the most important 'Core concepts'
- Purposefully REDUCE content and select of content based on the Prevalence of condition.
- Integrate learning outcomes across competencies (e.g. universal precautions, patient safety, ethical issues, clinical judgment, evidence-based practice, health systems & leadership, etc)
- Promote self-directed learning and active learning through case-based instruction; provide for integration among theory, clinical and simulation.

- Authentic formative and summative performance assessment.

Challenges in Clinical Education are many; the major ones among them are -
i. Dependent on placement opportunities & limitations
ii. Insufficient placements for "total patient care"
iii. Acute/severely-ill cases are at greater risk with neophyte students handling them
iv. Challenge of supervising students in rapidly changing situations - the 'service or supervision?' dilemma
v. Learning is dependent on "Chance-Factors":
    a. Availability of "teaching-cases"
    b. Availability of the Facility (OT, Skills Lab, Wards etc)
    c. Availability of faculty-staff with required expertise

Nursing Education: Taming of the 'Content Overload' or 'Content Tyranny'
Health professions education has reached content saturation. There is more content than can possibly be taught within any given traditional curriculum. The causes of content saturation are i) Explosive increase in knowledge base

Information Age, ii) Changes in Health Care Delivery, iii) Teacher-centred Pedagogy, and iv) Academic-Practice gap resulting in even more teaching to try and fill the gap. Covering too much content tends to make the learners overlook the concept.

A solution for this is to adopt "Concept Learning" model. What is a Concept? A concept is an organizing principle or a unifying classification of information. Concept Learning are of two types: i. Cognitive concepts, which are knowledge-based, e.g., 'error-free medication' and ii) Perceptual concepts, which are based on sensory perception, e.g., the feel of a soft or a hard lump, auscultation of foetal heart sound, etc.

The benefits of Concept-based Curriculum are several:
i. Focus is on concepts; not merely on facts
ii. Concepts are applicable across diverse populations and situations, e.g., Safe-Medication, Universal precautions etc.
iii. Conceptual learning: unlike facts, concepts are retained Life-long
iv. Stimulates critical thinking & deep learning
v. Meets needs of diverse learners

Challenges of Concept-based Curriculum that block its widespread adoption:
i. It is different
ii. Faculty lack understanding
iii. Faculty resistance to change
iv. Requires different level of coordination
v. Lack of literature detailing steps
vi. Easier to convey Facts than impart Concepts

If the teaching staff learn the skill and know-how of teaching concepts, rather than mere facts, it would go a long way.
Nine-Steps of "Concept Attainment" Model of teaching include the following:
- Select and define a concept
- Select the attributes
- Develop positive and negative examples
- Introduce the process to the students
- Present the examples and list the attributes
- Develop a concept definition
- Give additional examples
- Discuss the process with the class
- Evaluate

Addressing the Theory - Practice Gap

Theory and practice are reciprocally related: "Theory without Practice is purposeless & Practice without Theory is blind"

Theory practice gap – how does it affect the learners?

This affects the professional development of learners and may results in their inability to solve problems, rigidity of approach and dependency in providing patient care, fragmentation of patient care and an apathetic attitude in clinical practice.

Role of Educators in improving theory-practice correlation:

The nurse-educators need to -

i. Identify appropriate clinical problems for problem solving & decision making.

ii. Demonstrate to learners how to apply theory to real-life practice.

iii. Engage students in critical analysis & guide their own thinking process (meta-cognition)

iv. Use effective strategies to embed theoretical knowledge relevant to solving practical problems (Miller's Pyramid)

v. Provide realistic learning environment in which learners can correlate theory and practice

vi. Demonstrate to learners – how to individualize nursing care (Problem-Knowledge coupling: www.pkc.org)

vii. Have learners work together to help them to apply skills to a diversity of problems

Four proven teaching strategies to enhance theory practice integration are -

1. Problem based learning (PBL)
- Makes students responsible for their learning
- Student learning is organized around problems
- Barrow's Taxonomy gives a wide scope for educators to adopt PBL
2. Practice based Assignments to include real-life clinical problems.
3. Group discussions on practical evidence-based problem-solving .
4. Reflective practice

Future Trends in Nursing Education in 21st Century are -

i. Increased collaboration between nursing practice and nursing education

ii. Increased student & nurse mobility, including increased licensure mobility

iii. Increased distance (online) learning

iv. Schools of nursing providing continuing professional development

v. Increased teaching of evidence-based practice.

Summing Up

Our New Graduates should –

- Think critically and be able to solve complex, real-world problems
- Find, evaluate, and use appropriate learning resources
- Work cooperatively in teams and small groups
- Demonstrate versatile and effective communication skills, both verbal and written
- Become life-long learners to update their knowledge and skills acquired at the university

Can we achieve this? We can do it, if only we have the self-belief in our ability to motivate our students to achieve all the intended learning outcomes that will enable them to be competent nurses of the 21st Century.

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