FACULTY OF HEALTH
School of Nursing and Midwifery

Learning Disability Nursing

Roy’s Adaptation Model of Nursing

Resource Pack

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ROY’S ADAPTATION MODEL OF NURSING
**Background to the Theorist**

- American
- Paediatric Nursing background
- Basic concepts of the Theory developed between 1964 and 1966
- Theory operationalised in 1968
- Researched cognitive recovery in head injuries of children

**Influences**

1. Experiences in Paediatric Nursing - Roy noticed the childrens' resilience to adapt in response to physical and psychological change

2. Harry Helson's Adaptation Theory which suggests that adaptive responses are a function of incoming stimulus. The ability of a person to adapt is determined by the effects of 3 classes of stimuli:
   - i) Focal Stimuli which immediately confronts the individual
   - ii) Contextual Stimuli, which is all other stimuli present
   - iii) Residual Stimuli, which are relevant factors which may affect the behaviour of the individual, but whose effects are not validated

3. Rapoport's *systems* Theory

4. Hans Selye's work on stress and coping mechanisms

5. Abraham Maslow's work on Humanism

**Introduction**

Roy focuses on the concept of adaptation of man. Her concepts of Nursing, the Person, Health and the Environment are all interrelated to this central concept.

Helson's view that adaptation is a process of responding positively to environmental changes was used by Roy as the foundation for the model. This view, combined with Rapoport's definition of a "system" lead to Roy's theory of the person as an adaptive system. The model has been further refined using concepts from other theorists including Hans Selye and Abraham Maslow.

**Major Concepts and Definitions**
System - a system is a set of units, so related or connected as to form a unity or whole

Adaptation Level - a person's adaptation level is a constantly changing point made up of focal, contextual and residual stimuli. The adaptation level is the person's ability to respond positively to that stimuli.

Adaptation Problems - adaptation problems occur as a result of inadequate responses to stimuli

Regulator - the automatic response of an individual which is regulated by neural-chemical-endocrine control - e.g. fight-flight responses

Cognator - the response of an individual which is made following processing by the use of any of the following:
- Perception
- Information
- Learning
- Judgement
- Emotion

Physiological Mode - the body's basic needs and ways of dealing with adaptation in regard to: fluid and electrolytes; exercise and rest; elimination; nutrition; circulation and oxygen; and regulation (including the senses, temperature and endocrine regulation)

Self-concept Mode - the beliefs and feelings that one holds about oneself at a given time, formed from perceptions of other's reactions. Includes the physical self (self image) and the personal self (self-ideal or expectancy, the moral and ethical self)

Role Performance Mode - Role function is the performance of various duties based on given positions in society - e.g. wife, mother, nurse, student, patient etc.

Interdependence Mode - a person's relations with significant others and support systems

Major Assumptions

Assumptions from Systems Theory

1. A system is a set of units, so related or connected as to form a unity or whole
2. A system is a whole that functions as a whole by virtue of the interdependence of its parts
Discussion Point: In relation to application to learning disability nursing, do people who have learning disabilities necessarily function as a whole?

3. Systems have inputs, outputs and control and feedback processes

Discussion Point: In relation to application to learning disability nursing, people who have learning disabilities may also have communication problems. How difficult would make input, output, control and feedback processes?

Assumptions from Helson's Theory

1. Human behaviour represents adaptation to environmental and organismic forces

Discussion Point: In relation to application to learning disability nursing, people who have learning disabilities may not have the physical/sensory/intellectual ability to adapt to environmental/organismic forces. How would you ensure adaptation took place?

2. Adaptive behaviour is a function of the stimulus and adaptation level - ie the effect of focal, contextual and residual stimuli

Discussion Point: In relation to application to learning disability nursing, adaptive behaviour on the part of people who have learning disabilities may be seen as "challenging". There may be a need to teach other means of adapting to situations and a need to increase the repertoire of adaptive responses

3. Adaptation is a process of responding positively to environmental changes

Assumptions from Humanism

1. Persons have their own creative power

Discussion Point: In relation to application to learning disability nursing, do people who have learning disabilities have creative power?

2. A person's behaviour is purposeful and not merely a chain of cause and effect
In relation to application to learning disability nursing, is this true of people who have learning disabilities?

3. A person is holistic

4. A person's opinions and viewpoints are of value

In relation to application to learning disability nursing, are people who have learning disabilities valued by society?

5. The interpersonal relationship is significant

Parameters of Nursing

The nature of Nursing

Roy's goal of nursing is to help man adapt to changes in his physiological need, self concept, role function and interdependent relations during health and illness.

This goal relates well to learning disability nursing, as the self concept as defined by Roy may be damaged due to institutionalisation and devaluing of individuals by society's attitude.

In respect of role function, are people who have learning disabilities encouraged to develop positive positions and roles in society? This question of role function relates very well to the concept of Social Role Valorisation which emphasises the enhancement of the social role of individuals or groups at risk of social devaluation (Wolfensberger, 1983).

Nursing, according to Roy, fulfils a unique role as a facilitator of adaptation by assessing behaviour in each of these four adaptive modes and intervening by managing the influencing stimuli:

Physiological need - in learning disability nursing, managing the influencing stimuli for the physiological needs of people who have learning disabilities may involve adapting the environment to meet the needs of physical and/or sensory disabilities

Self-concept - in learning disability nursing, managing the influencing stimuli for the self-concept of people who have learning disabilities may involve social role valorisation and de-institutionalisation
Role function - in learning disability nursing, managing the influencing stimuli for the role function of people who have learning disabilities may involve facilitating valued social roles and positive life experiences of individuals.

Interdependent Relations - in learning disability nursing, managing the influencing stimuli for the interdependent relations of people who have learning disabilities may involve assisting in the maintenance of links with the family, encouraging relationships and support of other members of society who may or may not have a learning disability and supporting the individual as a surrogate relation.

The Nature of the Person

The person, according to Roy is the recipient of Nursing Care and is a living, complex, adaptive system with internal processes (regulator and cognator processes) which act to maintain adaptation in the four modes.

Discussion Point

In learning disability nursing, the question should be asked - can people with learning disabilities maintain adaptation without support in all cases? The aim of the learning disabilities nurse is to maximise the potential of the individual, therefore should this read "... maintain adaptation within limitations of potential" ... ?

The Nature of Health

Health, according to Roy, is a state and a process of being and becoming an integrated and whole person - an integrated whole. Adaptation is a process of promoting physiological, psychological and social integrity - integrity implies an unimpaired condition leading to completeness or unity.

When mechanisms for coping are ineffective, illness results. Health ensure when man continually adapts to stimuli. As people learn to adapt to one set of stimuli, e.g. mastering self-feeding, they can then concentrate on mastering another set of stimuli. "Freeing of energy from ineffective coping attempts can promote healing and enhance health".

Discussion Point

In relation to learning disability nursing, Roy’s definition of illness seems to blend very well, as illness in learning disability nursing, would be regarded as an inability to function independently as a whole, or an inability to adapt to society because of impaired mental or physical conditions. However, Roy’s definition of illness implies total dependence which is not necessarily the case. There may be a need to indicate the level of nursing intervention that is required - ie full physical assistance, partial physical assistance or educative assistance as in Orem's model of nursing.

The Nature of the Environment
According to Roy, the environment is all the conditions, circumstances and influences surrounding and affecting a person’s behaviour. Factors in the environment that affect the person are categorised as focal, contextual and residual stimuli. In learning disability nursing, the environment can have an immense effect on the behaviour of an individual, particularly if one considers the effects of institutionalisation or the antecedents of behaviour which challenges services.

Activity
Read the profile of Andrew Smith over the page and examine the assessment documentation and care plan on the following pages.
Profile of Mr Andrew Smith

Mr Andrew Smith is a 42 year-old man with severe learning disabilities. He lives in an eight-bedded unit in the grounds of an old institution which is currently being developed as a housing estate. The unit has a sister eight-bedded unit next door. These units are primarily for residential care, but the unit that Andrew lives on also has 3 short-stay beds within the units.

Generally, Andrew is a sociable person and enjoys the company of staff. He enjoys making other people laugh by his comic facial expressions and revels in attention. Andrew tends to be hostile towards the other service-users however, especially if they appear to be receiving more attention than himself, or if he feels they are making fun of him. He can also become hostile towards service users who are admitted for short term care. This hostility is expressed through biting staff and/or service-users, pushing people over or punching others. Andrew can also become aggressive towards others if asked to do something that he does not want to do or if he feels he is not able to do, for example if asked to put his coat on.

Andrew has lived in this home for the past 7 years. Previously he lived at home with his parents, however, his parents are elderly and his mother was not able to cope with his aggressive outbursts. If Andrew became aggressive towards his mother, she tended to pander to his requests. As a result, he came to expect more and more from his mother and resorted to aggression if any request was denied.

Andrew’s parents visit him every Saturday and always take him out to the local café for coffee. He looks forward to this and enjoys dressing in his smart clothes for the occasion. His parents do not take him far from the unit because they are concerned about possible aggression towards them.

He has little clear speech, but manages to make his needs known by gestures and grunts. Andrew's self-help skills are also limited. Although he is mobile, he has a left-sided hemiplegia – he has some use of his left hand and tends to drag his left leg when walking. He is capable of feeding himself, but is not able to cut his food up. He is not able to take himself to the toilet and has no control over his bladder or rectal sphincter and as a result is doubly incontinent. He is also prone to constipation and despite a high fibre diet requires regular phosphate enemas to prevent him from becoming impacted.

Andrew is not able to dress himself without assistance, but will position himself in such a way as to make dressing easier for the staff. Staff feel that Andrew would be capable of dressing himself despite his physical disabilities given the correct incentive.

Andrew has no occupation outside of the unit, but has the responsibility for taking the rubbish bags to a collection point. He is fearfully possessive of this role and will become aggressive towards other clients if they attempt to help him. He enjoys social outings and shopping trips and looks forward to these immensely.
## ASSESSMENT OF INFLUENCING STIMULI

| Assessment of Focal Stimuli | Frequent change of clients staying at the unit  
|                           | Lack of attention  
| Assessment of Contextual Stimuli | Lack of occupation  
| (indicate all other changes present which would contribute to the behaviour) | Lack of self help skills  
| Assessment of Residual Stimuli | Previously allowed to control his mother by becoming aggressive if he did not receive his requests  
| (indicate historical factors which may affect the behaviour) |  

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**ASSESSMENT OF SUB SYSTEMS**
<table>
<thead>
<tr>
<th>Assessment of physiological mode</th>
<th>left-sided hemiplegia makes self-help skills difficult, but has adapted to this disability for feeding and mobilising</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Little clear speech, but has adapted to this through the use of grunts and gestures</td>
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<tr>
<td></td>
<td>Doubly incontinent</td>
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<td></td>
<td>Prone to constipation</td>
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<table>
<thead>
<tr>
<th>Assessment of self concept mode</th>
<th>Has an awareness of his appearance and enjoys wearing smart clothes</th>
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<tbody>
<tr>
<td></td>
<td>Does not like other clients to make fun of his appearance</td>
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<td></td>
<td>Enjoys the company of others and appears to feel rejected if not given the desired attention</td>
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<tr>
<td></td>
<td>Gives the impression that he feels superior to other clients</td>
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<table>
<thead>
<tr>
<th>Assessment of role performance mode</th>
<th>Has no occupation outside of the home</th>
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<tbody>
<tr>
<td></td>
<td>Has one particular duty inside of the home which makes him feel superior to other clients</td>
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<table>
<thead>
<tr>
<th>Assessment of interdependence mode</th>
<th>Enjoys company of staff, but not necessarily other clients</th>
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<tbody>
<tr>
<td></td>
<td>Behaviour towards other clients is often negative - possibly due to his feeling of superiority</td>
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<tr>
<td></td>
<td>Enjoys the company of his parents, but still tries to control his mother through his aggression</td>
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**ROY'S MODEL OF NURSING**
<table>
<thead>
<tr>
<th>Need</th>
<th>Goal</th>
<th>Regulators/Cognators</th>
<th>Nursing Intervention</th>
</tr>
</thead>
</table>
| Aggression towards clients who are admitted for respite care | To eliminate aggression towards short-term care clients | Regulators - possible automatic response to strangers - ie fight/flight response  
Cognators - Past experience has proven this strategy to be successful - ie aggression towards others usually means that he will get his own way | Short-Term Intervention:  
➢ Ensure that Andrew has attention when short-term care clients are present  
➢ Reward Andrew for more appropriate behaviour towards short-term care clients  
Long-Term Intervention:  
To provide living accommodation which does not have a rapid turn-over of clients (accommodation should be in the community, close to parents' home) |
Activity

Outline below a pen-picture of a person with learning disabilities with whom you have worked then complete the nursing process documentation for Roy’s Model of Nursing on the following pages.
## ASSESSMENT OF INFLUENCING STIMULI

<table>
<thead>
<tr>
<th>Assessment of Focal Stimuli</th>
<th></th>
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<tbody>
<tr>
<td>(indicate the changes facing the individual which require a change in behaviour)</td>
<td></td>
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<table>
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<tr>
<th>Assessment of Contextual Stimuli</th>
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<tbody>
<tr>
<td>(indicate all other changes present which would contribute to the behaviour)</td>
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<tr>
<th>Assessment of Residual Stimuli</th>
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<tbody>
<tr>
<td>(indicate historical factors which may affect the behaviour)</td>
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<tr>
<td><strong>ASSESSMENT OF SUB SYSTEMS</strong></td>
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<td>--------------------------------</td>
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<tr>
<td><strong>Assessment of physiological mode</strong></td>
<td></td>
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<tr>
<td>(Indicate basic needs and ability to adapt in regard to fluid &amp; electrolytes; exercise &amp; rest, elimination, nutrition, circulation &amp; oxygen, senses and regulation of body systems)</td>
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<tr>
<td><strong>Assessment of self concept mode</strong></td>
<td></td>
</tr>
<tr>
<td>(Indicate beliefs and feelings held about physical self (self image) and personal self (self ideal or expectancy))</td>
<td></td>
</tr>
<tr>
<td><strong>Assessment of role performance mode</strong></td>
<td></td>
</tr>
<tr>
<td>(Indicate role function/performance of various duties based on given positions in society)</td>
<td></td>
</tr>
<tr>
<td><strong>Assessment of interdependence mode</strong></td>
<td></td>
</tr>
<tr>
<td>(Identify a persons relations with significant others and support systems)</td>
<td></td>
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<tr>
<td>Need</td>
<td>Goal</td>
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### Discussion Point

Having completed your assessment and care plan using Roy’s model, how do you feel the model caters for the following needs and rights of clients?

#### Needs:
- Psychological
- Social
- Physical
- Spiritual

#### Rights:
- Choice
- Privacy
- Respect
- Dignity
- Self-expression
- Individuality
- Participation in Nursing Methods and Consultation

### Activity

**Identify 5 positive aspects of the model for people with learning disabilities**

1. 
2. 
3. 
4. 
5. 

**Identify 5 negative aspects of the model for people with learning disabilities**

1. 
2. 
3. 
4. 
5.