NOSOGOGY: A RECENT CONCEPT OF PATIENT EDUCATION AND ITS ROLE IN RENAL PATIENT

Pradip Kumar Dutta[1]

Abstract

Nosogogy is the art and science of teaching adults affected by chronic diseases. Two learning processes in children and adult have already been described. 'Pedagogy' deals with child learning and 'Andragogy' with adult learning. Child learning is dependant learning and affected by external factors and socially customized. Adult learning is independent and needs internal motivation, as adults are well experienced. 'Nosogogy' though adult learning but unlike 'Andragogy' is dependant on health provider. So it is difficult to make it effective unless both educators and learners comply. As chronically ill patients never fully regain their health and may even worsen, often learning may fail. Also if educators are not technically sound, don't possess good communication skill, have not firm commitment, it will also tern education ineffective. Nosogogy is practiced in diabetology for long time but it is a newer concept in renal arena. Our renal failure patients pass through different modalities of costly treatment and have to compromise their habit, love, sex and others for their medication schedule. So a passionate, cordial, scientific, evidence-based approach by the health provider is appreciable for which a structured guideline –based programme is required to train the educators.

Introduction

'Nosogogy'is a term derived from a Greek ward 'νοσος' (nuomicronsigmaomicronsigma) meaning 'disease'. It could be defined as the science of teaching adults with chronic disease. There are two learning processes: 'Pedagogy' and 'Andragogy'. 'Pedagogy' deals with child learning and 'Andragogy' with adult learning. But these two sciences deal with normal individuals whereas 'Nosogogy' deals with diseased cases. So new considerations must be taken into account in managing such patients who never fully regain their health in spite of state-of-the-art treatment. In acute cases the conventional approach is biomedical 'acute' model, which passes through stages of health, disease, therapeutic intervention and recovery. This model is far from reality and is inadequate in chronically ill patients who not only never recover fully but also may in some occasions worsen even. So in such cases a newer approach is 'Nosogogy' which is a 'bio-psycho-social-educational model'. Here educator is healthcare providers such as nephrologists and nurses who understand characteristic conflicts and dynamics arising in the renal failure patients and the learner is diseased such as chronic renal failure patients. The prime requirement is possession of adequate communication skills to deal with the patient. Most of patient education programs is physician biased self-oriented, but it demands nation wide continuing medical education programs where experienced resource persons run different sessions to incite other physicians and nurses. Considering patient education it is a very much new story in nephrology unlike diabetology.

'Nosogogy' is a therapeutic edcational approach where a dependant chronically ill patient is made to live as much as independent. In Chronic renal failure (CRF) patient it is started in predialysis period. In child learning (Pedagogy) the subject is dependent, he has no previous experience, he goes through what society expects. In adult learning (Andragogy) the subject has a lot of experience, he is independent, and he learns what is useful to him.[1] In 'Nosogogy' the learner is adult but dependent on a health care provider like 'Pedagogy', facing a completely new world of critical life situation, worried and afraid. And his previous experience is of little resource unlike 'Andragogy'; rather he has to modify his habits, relationships, work, love and everything of the past. So it is very difficult for him to move towards independence. A variety of factors require attention in the design of patient education programmes for adults.[2] The most important one is internal motivation both for the learner and educator whereas in pedagogy external motivation is sufficient. [3] Table I shows the difference between 'Pedagogy', 'Andragogy' and 'Nosogogy'.[4]

1. Assistant Professor of Nephrology
Chittagong Medical College, Chittagong

Correspondence: Dr Pradip Kumar Dutta

Table-I: Differences between pedagogy, andragogy, and nosogogy

	Pedagogy	Andragogy	Nosogogy
The learner	Dependent	Independent	Dependent aiming to independence
Previous experience	Of little worth	Rich resource for learning	Something to modify
Subjects	People learn what society expects	People learn what they choose to know	People learn what renal staff expects to and what they need to perform the therapy

Why Nosogogy is needed in renal failure patient?

The final treatment of renal failure patient is peritoneal dialysis, haemodialysis, or transplantation. There are two parameters in renal failure patients: 'dialytic age' and 'non-dialytic age'. In both this ages he has to adhere to multiple life requirements and prescriptions. If a structured education program is not adopted in predialysis age it will be impossible for him to co-opt in dialytic age. Here is he has no option to choose rather than to behave what the renal staff wants and to learn in order to perform the therapy in best successful way. The longer the non-dialytic age the more difficult is adaptation.

What are the needs of our patients?

The needs of our patient vary according to different phases of renal insufficiency. A transparent idea of needs of patients is still to be acquired by many health-care professionals. Our patients don't regain their health fully, sometimes even worsens. We cannot effectively treat some conditions like pruritus and backache. This failure to complete cure is the root cause of continuous dissatisfaction on the part of patient, and loss of patience in renal staff. Table II and Table III distinguishes needs of patients emerging during predialysis and renal replacement therapy (RRT).[5] So a chronic patient requires not only the correct dose of EPO (Erythropoietin) or an adequate Kt/Vurea as per national or international guidelines but also requires some 'extra-clinical' competencies from his caregivers.

What are the causes of non-Compliance in the renal settings?

i) Sudden change of habit.
ii) Change of habit for life long (imagine even a doctor cannot regularly complete 7 days' course of antibiotics).
iii) Change of day-to-day food habit (such as fluid restriction, avoidance of Phosphorus and potassium containing fruit, fluid and food; protein restriction)
iv) Giving personal time to therapy time.
v) Adverse effect in pleasure of life (like social activities, sex, work and holidays).

Table-II: Needs of patients with renal disease in the predialysis phase

To receive treatment to slow the progression of renal disease and to minimize comorbidities
To be able to freely express his expectations, doubts, and fears
To trust that caregivers will consider his lifestyle while proposing a RRT
To receive help to understand what is happening to his life and the adaptations that will be necessary
To become a partner with his caregivers by acquiring the necessary skills to manage his case

Table-III: Needs of patients with renal disease during RRT

To receive an adequate dialysis treatment that minimizes comorbidities and complications
To be able to describe his own difficulties to an empathetic listener
To be helped to manage the multiple demands of the therapy
To not have his illness as the only horizon of his life's experience
To be compliant with the therapy and partner with his caregivers

What is disparity between caregivers' expectation and patients' attitude?

Though 'patient therapeutic education' is practiced in diabetology it is rarely exploited in other chronic patients like CRF [5]. Nurses and doctors want that their patients should maintain their own dialysis, prevent avoidable complications and maintain good

quality of life (QOL). They don't understand the patient. Patients should be educated how to enable themselves to manage and comply with management schedule.

What are the constraints of effective teaching? [6]

1. Diminished time from reduced hospital stay
2. Shortage of nursing personal
3. Pt's compromised physical and mental status.
4. Lack of written medication instruments.[7]

What is the advantage of patient's education?

The following studies showed the benefits of structured patient education:

i) Vancouver Study

Table-IV: Vancouver study [8]

Indices	Predialysis education Program	Unstructured follow-up
'Urgent start' dialysis	13%	35%
Access to PD*	53%	42%
Hospital stay (days)	6.5	13

*PD: peritoneal dialysis

ii) Ravani et al., showed less hospitalization in first 3 months of dialysis and lower risk of 'urgent start'.[9]

iii) Informed patients had greater access to home therapy like PD as shown in studies by Gomez et al, (56%), L Ballerini and V Paris, 4(40%) and Ravini et al, 9 (41%).[10]

iv) Marron et al. showed more planned starts (73.4vs26%) and more patients starting with PD (31 vs. 8.3%).[11]

v) Cutis et al. demonstrated higher haemoglobin; albumin and calcium levels in patients managed with multidisciplinary approach than standard nephrology care patients.[12]

What should be characteristics of a new educator?

i) Anyone committed to renal care.

ii) Passionate, emotionally balanced, free of prejudices, with good listening skill,

iii) Having sound knowledge of the renal arena

iv) Highly motivated and strong belief in positive results of patient education

What are logistic supports for new educators?

i) Well structured training sessions

ii) Continuous medical education programs run by experienced nephrologists and nurses.

iii) Adequate educational material

iv) Patient education material (brochures, leaflets, videos, CD-ROMs, internet sites, etc).

v) Assessment examinations of educators by multidisciplinary teams.

Conclusion

Nosogogy or 'therapeutic education program' will maximize both quantity and quality of life for the patient and will plunge psychological stress for caregivers. For every chronic disease there should be a standard national or at least institutional structured program to train patient and also virgin educator. It will make the center self-acting with better clinical and non-clinical out comes.

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