Conducting therapeutic cardiovascular education programmes in heart failure patients

Jean-Noël Trochu, MD, PhD
Institut du Thorax
CHU de Nantes
France
Management of heart failure

Control risk factors for the development and/or progression of HF

- Alcohol
- Tobacco
- CAD
- Ischemia
- HBP
- DB
- Lipids
- Dysthyr.

Treatment

- ACEI/ARB
- BB
- Spiro
- CRT/ICD
- Diuretics
- Digoxin
- Aerobic exercise

Close follow up

- Education
- Follow up
- Self monitoring
- Periodic tel. monitoring between office visits

Management of heart failure

Diuretics

ACEI/ARB

BB

Spiro

CRT/ICD

Aerobic exercise

Diuretics

ACEI/ARB

BB

Spiro

CRT/ICD
Recommended components of HF management programmes

- Multidisciplinary approach frequently led by HF nurses in collaboration with physicians and other related services
- First contact during hospitalization, early follow-up after discharge through clinic and home-based visits, telephone support, and remote monitoring
- Target high-risk, symptomatic patients
- Increased access to healthcare (telephone, remote monitoring, and follow-up)
- Facilitate access during episodes of decompensation
- Optimized medical management
- Access to advanced treatment options
- Adequate patient education with special emphasis on adherence and self-care management
- Patient involvement in symptom monitoring and flexible diuretic use
- Psychosocial support to patients and family and/or caregiver
ESC Guidelines for the diagnosis and treatment of acute and chronic heart failure 2012

**Table 26** Characteristics and components of management programmes for patients with heart failure with reduced ejection fraction and heart failure with preserved ejection fraction

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Should employ a multidisciplinary approach (cardiologists, primary care physicians, nurses, pharmacists, etc.)</th>
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<td>Should target high-risk symptomatic patients</td>
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<td>Should include competent and professionally educated staff</td>
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<td>Components</td>
<td>Optimized medical and device management</td>
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<td>Adequate patient education, with special emphasis on adherence and self-care</td>
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<td>Patient involvement in symptom monitoring and flexible diuretic use</td>
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<td>Follow-up after discharge (regular clinic and/or home-based visits; possibly telephone support or remote monitoring)</td>
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<td>Increased access to healthcare (through in-person follow-up and by telephone contact; possibly through remote monitoring)</td>
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<td>Facilitated access to care during episodes of decompensation</td>
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<td>Assessment of (and appropriate intervention in response to) an unexplained increase in weight, nutritional status, functional status, quality of life, and laboratory findings</td>
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<td>Access to advanced treatment options</td>
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<td>Provision of psychosocial support to patients and family and/or caregivers</td>
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Rehospitalization for Heart Failure
Predict or Prevent?

Desai AS, Stevenson LW. Circulation. 2012;126:501-506
Early hospitals readmissions

- Incomplete treatment in hospital
  - Euvolemia not reached
  - No comprehensive cardiac assess.
  - No tt up-titration
  - No discharge criteria
  - Insufficient control of preventable PF
- Absence of personalized care plan in early FU
  - Poor coordination of care
  - Poor communication
  - No pt/care providers education
How to prevent?

- **In-hospital QUALITY OF CARE**
  - Discharge criteria

- **EARLY FOLLOW UP after discharge**
  - Post discharge care plan, target high risk pts
  - Multidisciplinary approach, rehabilitation ctrs
  - DMP, nurse intervention
  - Treatment uptitration
  - Coordination of care
  - Psycho/socio/economic aspects
  - Pt/family education
  - Congestion handling
  - Vaccination
  - Early phase telemonitoring

- **ADVANCED HF**
  - HF specialists, refer to ref. centres
  - LVADs, HTX,
  - Palliative care

- **FU and COORDINATION of care**
  - Treatment adaptation, GPs, cardiologists
  - Pt/family education

Multidisciplinary management programmes in elderly HF patients

All causes rehospitalisations - 24%

All causes mortality - 20%

Roccaforte R et al EJHF 2005 7 1133
GP’s roles

- HF patients in GP practice in France:
  - 12% of > 60 years old pts, > 20% after 80 years old

- GP are in the first raw for:
  - Organisation of FU in collaboration with cardiologists, nurses, HF network, HF units and education
  - Screening for signs of HF worsening (dyspnea, signs of congestion, low output, angina, arrhythmia, syncope)
  - Medication up-titration and screening for treatment tolerance (drug related adverse effects, treatment interactions)
  - BP monitoring, heart rate, respiratory frequency, renal function, weight compared to stable state
  - Ionogram and serum creatinine: 5 to 7 days after each ACEI/AA2/diuretics modification, then on quarterly basis, blood cells formula every 4 months
  - NT proBNP / BNP: reference point during stability

- Every 15 days during drug titration, then on a monthly basis
Cardiologist’s roles

• **Actively involved in:**
  – diagnosis confirmation, etiologic and prognostic evaluation, follow up

• **Treatment uptitration should be a constant preoccupation**
  – especially in case of difficult situations: hypotension, renal dysfunction, hyperkaliemia, bradycardia

• **Treatment modifications:**
  – symptomatic low blood pressure (first get rid of vasodilators, reduce high diuretics, adapt medications)
  – transient decrease or cessation of ACEI, AA2, BB, MRB in case of dehydratation,
  – transient decrease or cessation of ACEI, AA2, MRB in case of hyperkaliemia, renal dysfunction

• **Rhythm control**
  – AF rate/rhythm control, AF ablation / AV node ablation
  – VT, PVC treatment

• **Agenda of FU by cardiologist**
  – on a quarterly basis in stable state
  – in CRT-D, CRT-P, DAI pts twice yearly at least.
  – specific CRT-D/ CRT-P/ICD FU in collaboration with electrophysiologists
Role of HF nurse?

- HF clinic
  - Education
  - Counselling
  - Telephone support
  - (treatment titration)

- Outpatient FU
  - Education
  - Counselling
  - Treatment titration
Patient’s role
Patient education

Help pts to have an optimal life despite/with their heart disease, to reconcile at best their life projects and exigencies of the treatment

• The main component of self management
  – gain awareness of signs and symptoms,
  – accomplish life style changes and treatment adherence

• Information does not guarantee gain in knowledge

• Increased knowledge may not lead to increased self management behaviour

• Education goes beyond information
  – sharing of competences
  – formation to decisions making
  – partnership btw care providers/pts
  – comprehensive approach

• Multidisciplinary and multi-professional approach allowing the patient to:
  – set his disease with regard to his life project, representation of health, acceptation of a chronic disease

• Specific pedagogic skills and education for care providers

Albano et d’Ivernois. Cahiers pédagogiques 2001 399
Ditewig JB Patient education and counseling 2010 78 297
Patient education

Quality criterion

- Centered on the patient and his/her family
- Personalized
- Negotiated
- Structured, formalized
- Multidisciplinary teams
- Education of the care providers
- Integrated in the care
- Evaluated

Laboratoire de Pédagogie de la Santé (UPRES EA 3412), Université Paris13
Define personalized objectives

Table I. Référentiel de compétences pour les patients insuffisants cardiaques – Réseau Respecticœur.

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<th>Activity</th>
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<tr>
<td>Repérer les signes d’alerte annonciateurs d’une décompensation :</td>
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<tr>
<td>– se peser régulièrement ;</td>
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<tr>
<td>– repérer ses œdèmes ;</td>
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<tr>
<td>– analyser son degré d’essoufflement et de fatigue.</td>
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<tr>
<td>Décider les actions à entreprendre devant les signes d’aggravation (alerte, consultation médicale, modification du traitement diurétique) en situation d’urgence ou non.</td>
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<tr>
<td>Limiter sa consommation sodée quotidienne (en prenant des repas cuisinés sans sel, en contrôlant la quantité d’aliments salés), dans la vie courante et lors de situations particulières.</td>
</tr>
<tr>
<td>Pratiquer une activité physique adaptée en régularité, en durée, en intensité (n’entraînant pas de symptômes).</td>
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<tr>
<td>Organiser la prise des médicaments, prendre régulièrement son traitement.</td>
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<tr>
<td>Consulter régulièrement son médecin.</td>
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<tr>
<td>Communiquer sur sa situation de santé de façon adaptée au contexte.</td>
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<tr>
<td>Réajuster l’autosurveillance, l’alimentation, l’activité physique, la prise du traitement en cas d’événement intercurrent.</td>
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Educational program

• Educational sessions, individual or collective
  – Decentralized (accessibility)
  – Multidisciplinary, multiprofessional: nurse/cardiologist, nurse/dietician co-animation
  – Educational tools and methods adapted to the patients
  – Integration of relatives
  – Methodological variations depending on: age, pathology, context (intra-extra hospital), etc.

• Collective sessions
  – Support and efficacy relaying on interactions btw pts
  – Competences hypothesis validated by the group
  – Reformulation
  – Cognitive aspects: reinforcement of acquisitions

• Pragmatic point of view:
  – 7/8 patients for 2 teachers
Adaptability

• Take into account the typology of the patients:
  – elderly, loss of autonomy, cognitive and sensory disorders, associated morbidity

• Flexibility of MMP:
  – adapt methods, objectives
  – relocation of education sessions, family education, social issue handling
  – coordination of education required with other care providers for consistency and relay of the educational messages
  – Several educational programmes?
Adaptability

• Accept the limits of patient education
  – autonomy, self management skills wont be reached in every patients

• Tailored care
  – reinforce support and care when not possible
  – End of life care implementation

• Get rid of common reserves:
  – Too old, doesnt understand, wont accept, poor education,etc. => it may works
Education follow up

- Regular phone calls (HFN ➔ pts/pts ➔ HFN)
  - Handled by trained nurses, evaluation of skills and knowledge on: weight, shortness of breath, fatigue, etc.
  - Tracking down hazard situations
  - Opportunity for the patient or their family to talk about any difficulties
  - Essential component of coordination of care, pt and family support, pt education

- Individual meetings weeks/months after the initial education
Therapeutic education: a comprehensive approach

- Continuous education:
  - initiale phase of education
  - Educative follow up
  - Resumption education phase
  - Multiprofessional, multidisciplinar

- Adhesion
  - proposition of GP or cardiologist
  - during hospitalisation

- Education
  - educational diagnosis
  - Individual education
  - collective education

- Clinical and educational follow up
- Periodical evaluation
How can we offer to each patient a personal care plan?

• Initially patient education was developed in the setting of hospital organizations.

• Increasing number of patients with chronic diseases and the subsequent need of implementing outreach community educational programmes:
  – Multidisciplinary management programs (MPP) have been developed in the early 2000’s trying to respond to this question.
  – based on structured patient education programs and coordination of care
  – structured, flexible, tailored and accessible organization, this program and others have demonstrated their beneficial effects on quality of life, reduction of hospital readmission and survival.
  – will reach all chronic patients?
How can we offer to each patient a personal care plan?

- Implement education intervention in the setting of ambulatory care
- MMPs have developed highly specific educational and organizational skills
- They should be asked to help primary health care professionals to implement education programs in the setting of multidisciplinary primary care centers.
Conclusion

• Importance of in-hospital quality of care
  • control congestion, reach euvolemia -avoid over-diuresis-
  • implement guideline HF medication
  • define clear discharge criteria

• Importance of a personalized care plan
  • early risk of death and readmission after HF hospitalization
  • early monitoring, role of telemonitoring?
  • prevent precipitating factor
  • multidisciplinary approach
  • Patient education

• How can we implement outreach community educational programmes?