

HEALTH CARE STRATEGIES TO RAISE DIABETES AWARENESS IN NORTH INDIA

Sanjay Kalra, DM (AIIMS)
Bharti Hospital
Karnal, Haryana, India
sanjay @bhartihospital.org

BACKGROUND

- ❑ Therapeutic patient education, or health education, is an essential component of chronic disease care.
 - ❑ No diabetes management programme is complete without health education.
 - ❑ Behavioural modification is necessary to manage behaviour- or lifestyle-related diseases such as diabetes.
 - ❑ Behavioural modification cannot be accomplished without health education.
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BACKGROUND

- ❑ Numerous guidelines are available regarding medical management of diabetes.
 - ❑ Little research, and no guidelines, however, are available on how to choose correct health education strategies for persons with diabetes.
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AIM & OBJECTIVES

- To assess the relative efficacy of various health education strategies in improving diabetes awareness.
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DESIGN

- Exploratory study
 - Prospective
 - Interventional design
 - At a single endocrine OPD in North India
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MATERIAL & METHODS

- All subjects attending OPD were exposed, over 3 month period, to
 - posters
 - leaflets
 - hand written charts
 - certain free investigations
 - television advertisements/pamphlets
 - one – to- one education

Aim : to achieve behaviour modification w.r.t

- investigations
 - treatment
-

MATERIAL & METHODS

- 200 patients followed up over 3 months, at 2-4 week intervals
 - All patients met the lab technologist, podiatrist, dietician and 'multipurpose diabetes worker' at every visit
 - All patients then consulted the endocrinologist
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MATERIAL & METHODS

- ❑ Pre-tested questionnaires were filled up by patients at start and end of study, in Hindi
 - ❑ Questionnaires were filled up before entering the doctor's chamber, after having consulted paramedical staff
 - ❑ Patients could consult receptionist for help in understanding the questions
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One-to-one counselling

Focus on

- Diet
- Exercise
- Stress management
- insulin use

Conducted by

- Dietician
 - Clinical psychologist
 - Multi-purpose diabetes workers
-



One-to-one counselling

- Focus on
 - Checking urine ketones
 - Checking urine microalbumin
 - Checking HbA1c
 - Conducted by
 - Lab technologist
-



One-to-one counselling

- Done by
 - podiatrist
 - Focus on
 - Seeking treatment for sexual dysfunction
 - Seeking treatment for foot complications
 - Getting investigations
 - Biothesiometry
 - ANSimetry
 - Vascular doppler
-



Posters

- Provided by pharmaceutical companies
 - Focus on
 - Insulin use
 - Foot care
 - Glucose monitoring
-



I am a diabetic, I take
good care of my feet.
Do you?

Foot Care for Diabetics



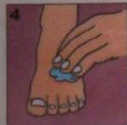
1 Wash your feet daily with lukewarm water and soap, just as you wash your hands.



2 Dry your feet well, also between the toes



3 Cut your nails straight across. Ingrown nails and callus should receive expert attention.



4 Keep the skin supple with a moisturizing lotion, but do not apply it between the toes.



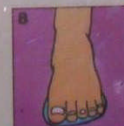
5 Use clean, soft socks and stockings which are neither too big nor too small.



6 Keep your feet warm and dry. Preferably wear cotton socks or stockings and leather shoes.



7 Never walk barefoot – neither indoors nor outdoors



8 Always wear shoes or sandals that fit well.



9 Examine your shoes every day for cracks, pebbles, nails and other irregularities.

NovoCare
NOVO NORDISK DIABETES SERVICES



MAGNUS Pharma

Knoll Pharmaceuticals Ltd
Magnus Division
17 R Kambli Marg Mumbai 400 071

Novo Nordisk (India) Pvt Ltd
"Rajesh Chambers", 14/2, Brundon Road,
Bangalore 560 022



Television advertisements

- Inserted by doctors
 - Aired by local TV channels
 - Focus on
 - Eye care
 - Laser treatment for retinopathy
 - Diet
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Hand-written charts

- Made by children during Diabetes Day celebrations
 - Focus on
 - Hygiene
 - Healthy diet
 - Exercise
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BHARTI HOSPITAL, KARNAL, INDIA

E-mail : bhartihospital@rediffmail.com

Website : www.bhartihospital.org

Ph. : 091-184-2268585, Fax : 091-184-2267885



Newspaper advertisements

- Inserted by doctors, chemists
 - Focus on
 - Eye care
 - Retina examination
 - Exercise gadgets
-

Leaflets

- ❑ Kept at reception counter, with diabetes counsellors
 - ❑ Patients encouraged to take them home, read, discuss with family members, and clarify doubts on next visit
 - ❑ Both customized, and provided by pharma companies
 - ❑ Focus on all aspects of diabetes care
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Free investigations

- Urine microalbumin
 - Biothesiometry
 - Vascular doppler
 - Quality of life questionnaires
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- All accompanied by explanation
 - Used for risk stratification
 - Used to encourage treatment-seeking behaviour
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OUTCOME MEASUREMENT

- By a patient –reported 5 point Likert Scale, at beginning & at end of study period.
 - Change in behaviour index noted for different
 - methods of education
 - investigation- seeking behaviour
 - treatment - seeking behaviour
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EFFECTIVENESS OF EDUCATION STRATEGIES: change in behaviour index

□ One to one counselling	3.4 ± 1.28
□ Hand written charts ¹	2.5 ± 1.2
□ Pamphlets ²	2.0 ± 1.22
□ Posters ²	2.3 ± 1.2
□ Newspaper adverts ³	1.9 ± 1.22
□ TV adverts ³	1.7 ± 1.26

¹ p > 0.5 w.r.t. one to one

² p = 0.05 w.r.t. one to one

³ p < 0.01 w.r.t. one to one

CHANGE IN INDIVIDUAL BEHAVIOUR: investigations

Willingness to undergo

urine ketone 3.4 ± 0.48

HbA1c 3.4 ± 0.48

biothesiometry 3.4 ± 0.48

retina exam 1.2 ± 0.4

CHANGE IN INDIVIDUAL BEHAVIOUR: treatment

Willingness to undergo treatment for/with

sexual complications	3.7 ± 1.0
Insulin	2.5 ± 0.4
Foot problems	4.2 ± 1.0
Laser therapy	1.2 ± 0.4

Differential response to strategies

- Felt needs vs, actual needs
 - Human element
 - Personalized touch
 - Efficiency? Acceptability?
Appropriateness? of printed material
-

Differential response to strategies

- ❑ Felt needs vs, actual needs
 - ❑ Patient's needs should be foremost, not the doctor's needs, e.g. sexual dysfunction vs. laser therapy
 - ❑ Achieve concordance between felt and actual needs
 - ❑ Treat felt needs first
 - ❑ Find a motivating factor
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Differential response to strategies

- Human element
 - Personalized touch

 - Results may vary from counsellor to counsellor, e.g.,
 - Counsellors should be trained in motivational interviewing
 - Printed posters should have a personalized touch, e.g. a hand written heading or footer
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Differential response to strategies

- ❑ Efficiency? Acceptability?
Appropriateness? of printed material
 - ❑ Centralized preparation of educational materials may not work
 - ❑ Colour scheme, font size, trying to pack all information into one page: may backfire
 - ❑ Literacy vs. functional literacy
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अपने डॉक्टर की सलाह पर अमल करें और रक्त में शर्करा स्तर पर निगरानी रखें



अपनी आंखों और दृष्टि की जांच करवाएं

पैरों की हर दिन जांच करें



ब्लड प्रेशर की नियमित जांच करें



अपने वजन पर नज़र रखें



मधुमेह जीवन भर रहने वाली बीमारी है. इसलिए अपने डॉक्टर को बदले नही, क्योंकि वही आपको और आपकी परेशानियों को अच्छी तरह समझ सकता है.

Initiate insulin early. Change life



Mixtard 30 NovoLet

Initiate the ^{actually} painless insulin experience



CONCLUSION

- ❑ One to one counselling is the most effective method of health education/behaviour modification .
 - ❑ It should be supplemented with handwritten charts.
 - ❑ Various aspects of diabetes related behaviour respond differently to health education strategies.
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- More quantitative research is needed on this aspect of diabetes management.
 - Research should focus on which interventions, delivered by whom, can help us improve different treatment-seeking behaviour in persons with diabetes
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Thank you

