

**MULTI –PURPOSE DIABETES WORKERS:
developing the poly-provider in India**

Dr. Sanjay Kalra
BHARTI HOSPITAL, KARNAL
www.bhartihospital.org

INTRODUCTION

- This presentation reports on a training programme for diabetes care personnel developed by a pioneer institution located in an underserved area of northern India .

BACKGROUND

- Delivery of diabetes care is a challenging task.
- No single individual can provide all the services that a person with diabetes requires.
- Trained staff is not available in many underserved areas.
- The staff that is available is often overwhelmed by the number of patients.

BACKGROUND

- South Asia faces a severe shortage of nurses and paramedical staff
- INDIA: 0.6 DOCTORS and 0.8 NURSES /1000 pop
- JAPAN: 1.98 DOCTORS, 7.79 NURSES
- PAKISTAN: 0.74 DOCTORS, 0.31 NURSES
- BANGLADESH: 0.26 DOCTORS, 0.14 NURSES

BACKGROUND

It is difficult to find and retain qualified staff

It is difficult to create efficient teamwork

It is sometimes difficult to ensure effective communication between staff and patients, if they come from different social backgrounds

SOLUTION

- Bharti Hospital Karnal has developed a 4 tier model which utilizes Multi purpose Diabetes Worker (MPDWs) to provide diabetes care.



Physicians

Qualified
paramedics

Polyproviders

FIRST - TIER

- **MULTI PURPOSE DIABETES WORKERS.**
- Multi Purpose Diabetes workers are trained by the Hospital itself.
- Young, energetic, enthusiastic, highly motivated
- Age: 20 to 35 years
- At least senior secondary schooling with or without paramedical diploma



SECOND -TIER

- It consists of :-
 - Dietician
 - Physiotherapist
 - Clinical Psychologist
- Each specialist handles his or her aspect of diabetes care in patients.

THIRD -TIER

- The endocrinologist.
- Endocrinologist handles
 - medical and endocrine aspects of diabetes.
 - supervises and trains the first two tiers professional.
 - captains the team.

FOURTH -TIER

- Visiting/support specialists
 - Reproductive Endocrinologist.
 - Pregnancy Specialist.
 - Foot Surgeon.
 - Retina Specialist.

Poly-providers

- First line of defence
- First line of offence
 - Against diabetes
 - Against complications
- Trendsetters in the region
- Help change the natural history of diabetes
 - In our patients
 - In the community

Poly-providers

- Trained in hard skills
 - Diabetes overview
 - Foot care
 - Diet, exercise
- Trained in soft skills
 - Confidence building/Relationship building
 - Empathy
 - Stress relief, coping mechanisms
- Empowered to carry out investigations
- Allowed to suggest therapeutic plans

Poly-providers

- Trained in history taking: Causes of poor glycemic control
 - DIET formula
 - Drugs
 - Depression
 - Diet
 - Infection
 - Instrument malfunction
 - Indigenous medicines
 - Ethanol
 - Exercise, lack of
 - Endocrine disease
 - Technique mistake

Poly-providers

- Trained in motivational interviewing
 - WATER formula
 - Welcome warmly
 - Ask and assess
 - Tell truthfully
 - Explain with empathy
 - Return and reassure

Poly-providers

- Trained in dietary management
 - Balanced diet
 - Food exchanges/portions
 - Calorie counting
 - Healthy/low-fat cooking
 - Seasonal availability of foodstuffs
 - Economic issues

Poly-providers

- Empowered to carry out investigations
 - Urine ketones
 - Biothesiometry
 - Peripheral doppler
 - ANSimetry
- Allowed to suggest therapeutic plans
 - Podiatry management
 - Insulin initiation
 - Insulin adjustment
 - EMERGENCY DKA management
 - ALL THERAPEUTIC DECISIONS ARE AUDITED BY ENDOCRINOLOGIST

Poly-providers

- From wide range of socioeconomic backgrounds, castes, geographical areas, with varied linguistic skills
- Work best when dealing with patients from their own community, using the same dialect
- Patients feel more comfortable asking questions, clearing doubts
- Are able to stand in place of lab technologists, phlebotomists, pharmacists, dieticians, when needed

Training programme

OBJECTIVES

- To train paramedical workers and pharmaceutical representatives as polyproviders for diabetes care
- To utilize the services of these MPDWs in existing diabetes care setups

Training programme

OBJECTIVES

- IN service staff from Bharti Hospital and other nearby hospitals
- Nursing tutors from Nursing School
- Doctors with degrees in traditional medicine (Ayurved)
- Medical representatives from a company engaged in conducting diabetes camps for patient education

Training programme

EXECUTION

- On-site training, in batches of 2 to 4, over 3 days
- By doctors, dietician, physiotherapist, clinical psychologist and podiatrist
- Mix of theory and practical teaching
- Teaching aids: LCD, insulin demonstration kit, food museum, exercise kits
- Patients utilised as 'educators' to explain their perspective of diabetes, and diabetes care

Training programme EXECUTION

- Three days training of 10 hours each (with breaks)
- During working hours, to minimize cost



Training programme day 1

- Welcome
- Philosophy of Bharti Hospital
- Vision/mission statement
- Diet & nutrition
- Anthropometry: workshop
- Counting calories: workshop
- How to eat less: group discussion
- Laboratory investigations/practical
- Exercise and fitness: practical
- Podiatry/foot care: practical
- Reception behaviour
- Patient interaction

Training programme day 2

- Patient interaction
- Patient interaction
- How to make friends with patients
- Tackling stress
- Bhagwad Gita/Bible and Diabetes
- Utilizing spare time with patients
- Relaxation techniques
- Insulin
- Insulin workshop
- Ensuring drug compliance:workshop

Training programme day 3

- Planning a camp
- Counselling tips
- Role of pharmacist
- Drugs in diabetes
- Biothesiometry/ ANSimetry: practical
- Vascular doppler : practical
- Sexual counselling
- Motivational interviewing
- assessment



Training programme RESULTS

- 43 'GRADUATES'
- 30 male, 13 female

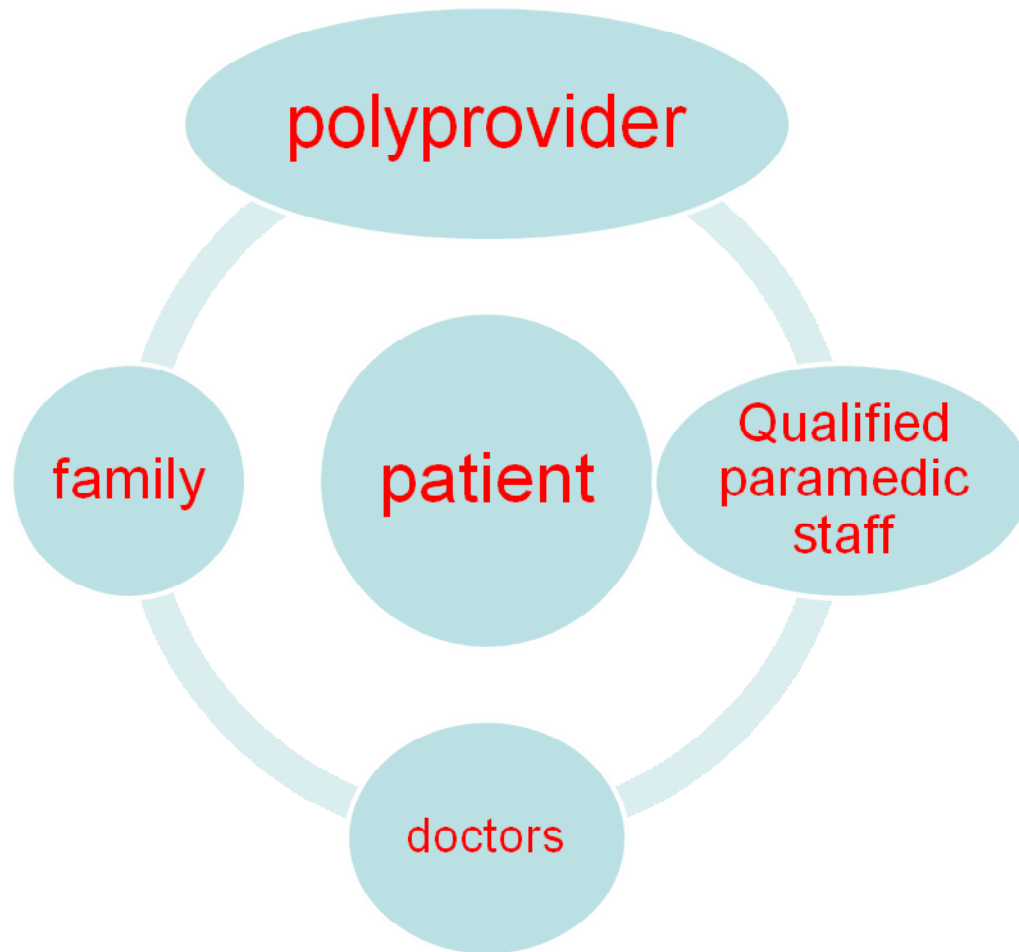
- 14 in-house candidates
- 16 pharmaceutical representatives
- 4 lab technicians
- 3 dieticians
- 6 doctors

- 18 diploma-holders
- 17 degree-holders
- 8 postgraduates

Training programme EVALUATION

- DONE AT 3 TO 6 MONTHS for 20 pass-outs
- Significant ability to counsel patients, discuss various aspects of diabetes care
- Good acceptance by patients, doctors
- Best results in MOTIVATION

- No formal evaluation by outside agencies
- Some doctors find teamwork difficult to accept
- Oriental 'hierarchy' system
- Ethical issues may be raised regarding participation of pharma company personnel



CONCLUSION

- POLYPROVIDERS can easily be recruited and trained to provide good quality diabetes care, under guidance, to patients.
- Polyproviders can provide the much-needed support to doctors dealing with diabetes
- This concept should be utilized in other parts of the world

