

## **CAMP FOR CHILDREN AND YOUTH WITH DIABETES: SPECIFIC AIMS AND ORGANISATION**

*Dr. S.K. Garg,*

Department of Experimental Medicine, Postgraduate Institute of Medical  
Education and Research, Chandigarh

Dr. M. Joshi

Department of Endocrinology Diabetes, All India Institute of  
Medical Sciences, New Delhi, India

### **A. Specific AIMS:**

Organisation and conduct of health education/training cum recreation camps for children and youth (under 21 years) with diabetes mellitus in India, as an integral part of their diabetes care.

Education and training of physicians and other health professionals and students about various facets of diabetes mellitus and its management.

Novel observations about diabetes mellitus in children and youth, and further investigations of societal/individual benefit.

### **B. Significance:**

Diabetes being a life long debilitating disease with widespread medical and social ramifications, demanding high degree of discipline on the part of the patients and health professionals alike, such organised health maintenance and promotional activities may contribute to the improvement of the health and overall well being of individuals (in the early tender years and prime of life) with diabetes, betterment of family welfare may also be anticipated.

### **C. Preliminary Work/Progress Report:**

The value of camps in diabetes care appears to be well accepted in the economically more affluent western world. With the ongoing social changes in the post-independence India and the increasing health awareness/consiousness of the aspirant society, the need for such opportunities for our children and youth seems apparent. Experience from other centers in diabetes camping can be useful, and necessary collaborations are being sought (EP Joslin and Clara Barton Camps, MA USA, Eagle's Nest Camp, NC USA, Camp Midicha, MI USA); however the social and cultural conditions prominent in India need consideration.

## **D. Methods and Design:**

1. Venue: Rajkumari Amrit Kaur Bhawan, Summer Hills, Simla, HP.
2. Dates: Summer camp: May 23 to 29, 1988
3. Demography: Diabetes mellitus, 6 to 21 years age; co-ed, both boys and girls; all socio-economic and educational groups; absence of any acute complications and incapacitating associated diseases; Camper strength : 30 to 50 (actual 28), grouped into 5 to 7 (actual 4) cabins of 7 to 10 children each. Besides the full time/overnight campers, parents and siblings, and other interested medical/professional personnel can visit the camp during the day and participate in any of the activities.
4. Finances: No profit, no loss: setting up a "Diabetes Camp" account - tax deductible exempt with RSSDI, active fund raising (pharmaceuticals and health care product companies, families - voluntary donations, government). Scholarship scheme, to partially or fully waive the costs for 'poor' but eligible children.
5. Clinical activities: Complete admission (or precamp medical review) history and physical examination; urine and blood sugar monitoring; instructions in self-home blood glucose monitoring, exercise/physical activity programmes; health education/training : diabetes education programme.
6. Recreational and social activities: games, hiking, play/skits
7. Research: Diabetes screening; Childhood diabetes registry.
8. Camp manual and orientation (for both health care professionals and campers/families).

## **Objectives**

To provide a structured medical cum recreational camping experience for children and youth with diabetes mellitus (and their families) in a non-hospital ("life") setting.

To educate and train physicians, other health professionals and students about various facets of diabetes mellitus and its management.

To make novel observations about diabetes mellitus in children and youth, and conduct further investigations of societal/individual benefit

For children and youth with diabetes mellitus:

1. To help children and youth with diabetes learn more about the disease, its control and optimal management.

2. To help teach children with diabetes self-discipline in their approach to the disease and in their approach to life in general.

3. To optimise the medical program of children with diabetes in an attempt to seek normalisation of blood glucose levels without hypoglycemia and ketoacidosis.

4. To enable children with diabetes meet and associate with other children, including those also with diabetes.

5. To provide counselling for parents in effectively dealing with their children's diabetes.

6. To provide a safe and healthy environment for such organised activities.

For medical/health personnel:

1. To become more familiar with the metabolic abnormalities, complications and management of diabetes mellitus, at the clinical and investigative levels.

2. To become more adept at balancing diet, exercise and insulin therapy to achieve optimal control of diabetes.

3. To appreciate the effects of social and emotional factors on children with diabetes.

4. To become more familiar with simultaneous management of minor medical problems and first-aid.

5. To participate effectively in complex team effort.

For both:

1. To understand the compatibility between learning, living and fun.

It is hoped that the benefits accrued to all the camp participants will outlast the actual camp period, and will contribute to their welfare long beyond the camp session.

### **Philosophy:**

Camping is defined as "a sustained experience which provides a creative, educational and recreational opportunity in group living in the out-of doors; it utilises trained leadership and the resources of nature to contribute to each camper's physical, mental, social and spiritual growth." (American Camping Association). We endorse the perception that we should "conceptually think of these programmes as being CAMPS for CHILDREN and YOUTH who have DIABETES MELLITUS (in that order of priority)." American Diabetes Association).

Further, the philosophy of care of diabetes at camps can include:

1. Striving for a positive attitude of acceptance of diabetes;
2. Taking advantage of the unique opportunity for education about diabetes in terms of knowledge, techniques and attitudes;
3. Aiding the camper in attaining his/her fullest potential in all areas;
4. Providing adequate control of diabetes for growth and development, and striving for excellence of control to try to minimise the complications of diabetes;
5. Striving for metabolic and health care safety, including avoidance of severe hypoglycaemia and ketoacidosis.

Camp medical care is to enable and assure a beneficial and an enjoyable experience at camp. It must work from within and in conjunction with the overall camp program. It must be determined by a team approach, including various medical disciplines (physicians, nurses, nutritionists etc.) and children with diabetes and their families. Medical management is to be sensitive to the needs and concerns of children and youth. Medical care and diabetes education cannot be separated.

### **Organisation:**

#### *Medical Personnel:*

General responsibilities:

It must be emphasised that all camp activities are a 'TEAM EFFORT' with all the members participating in all activities. There should be a joint free-flowing interaction with the medical staff also participating actively in all recreational activities as well. Participation of each member (physician, nurse, nutritionist etc.) to clarify various points in individual life pattern of diabetic children will be encouraged. Coordinated service can be facilitated by pre-camp education: Camp Manual, pre-camp orientation sessions (AIIMS, PGIMER) and daily medical staff group meetings at the camp at predesignated times (end of morning assembly and post-dinner evening rounds). Adequate record keeping would be necessary.

### **Camp Director**

The camp director will have the ultimate organisational, administrative and operational responsibility for all the activities of the camp. He/she will be always available for consultation for all problems, both medical and non-medical, also providing arbitration for any differences of opinion. He/she is responsible

for recruitment of all medical staff and staff education, overall health and safety of all at camp, overall compliance of children and youth with diabetes and the medical staff with the camp policies and guidelines. He/she will preside over the inauguration and farewell events, and lead the morning assembly and the morning and evening medical staff meetings. He/she will be responsible for delivering/approving any statements made to the news media and other agencies regarding medical aspects of the camp.

#### **Administrative Committee:**

The administrative committee along with the administrative secretaries (AIIMS, PGIMER) will assist the camp director in the successful and smooth conduct of the camp activities, involving a major coordinating role. One of its members can also provide back up/coverage to the camp director during his absence/emergencies.

#### **Finance Committee:**

Responsibilities include operation of the Diabetes Camp bank account, coordinating fund raising and donation collections, maintenance of budget records, and preparation and submission of the annual financial report to RSSDI general body.

#### **Accommodation Committee:**

Responsibilities include booking and precamp survey of the camp site and related housing facilities, ensuring adequacy of essential amenities (eg. water supply, electricity, heat-fuel, bathrooms etc.), short term hiring of additional amenities (eg. extra mattresses, linen etc.), allotment of cabins to each group, and arranging accommodation facilities for the infirmary, common room/lecture halls, kitchen/dining room/snack bar.

#### **Transportation Committee:**

Responsibilities include booking of all necessary modes of travel from AIIMS/PGIMER to camp sites, and return; medical institute vehicles, train, bus, minivans, cars; provision of travel timetable and any special instructions; also transport arrangement for morning and afternoon outings and 24 hour transport coverage for medical emergencies.

#### **Registration Reception Committee:**

Responsibilities include distribution of camp flyer and registration forms to all interested families, pre-camp counselling, interview, evaluation and approval of qualified children and youth with diabetes (and their families), allotting the

campers into different cabins (violet, blue, green, yellow, orange, and red), day 0 pre-camp medical review at AIIMS/PGIMER (history, physical examination, investigations and therapeutic guidelines), reception and introduction events on day 1 — compilation and distribution of comprehensive discharge summaries and parent advice on the last camp day, analysis of patient/parent feedback forms, follow-up and recommendations for future.

### **Medical Care Committee:**

Comprising a physician and a nurse (for both PGIMER and AIIMS groups combined), responsibilities include procurement of all necessary (routine and emergency) medical supplies for travel and camp stay. Organisation and overall incharge of the infirmary (2 patients beds : duty doctors area) and total camp medical care, daily infirmary coverage from 0800 to 2000 hours, preparation of night duty physician roster (for infirmary coverage from 2000 hours to 0800 hours), 24 hour emergency consultation, liaison with the regional tertiary care medical facility (eg. Simla Medical College; PGIMER), evaluation and counter-signing of discharge summaries and parent-advice and post-camp medical follow-up. They will have key role in daily medical staff meetings and will review the daily progress of diabetic campers with the counsellors of each cabin. They are trouble shooters for medical problems of any kind. Registration forms, case sheets and all other important medical records will be safely filed and stored in the infirmary with easy access to all medical staff.

### **Nutrition Dietary Committee:**

Responsibilities include pre-camp planning and scheduling (day by day time table) of nutritionally adequate meals and snacks for children with diabetes and other campers (also travel and picnic lunches and snacks), advice regarding purchase of materials and bulk food orders, overall supervision of food production / distribution (by 2 — 4 kitchen staff and volunteers, also running the camp snack bar) — diabetic cookery and kitchen hygiene, and inventory and management of kitchen stores. They will participate in diet prescription (writing and filing diet cards), provide meal plan and nutritional counselling (individual and group), and present the Nutrition and Dietetics part of the overall diabetes education program (formal course number DEP-002, Management of diabetes, meal plans; nutrition posters and daily notices in the dinning hall, nutrition/diet games and quizzes, novel diabetic recepies: pamphlets, possible practical demonstrations to campers and parents) and contribute to record keeping (nutrition/diet portion of case sheets and discharge summaries : formulation of a home diet programme) and post-camp follow-up. Note: all food distribution will be on a self-service buffet format, with the children being directly involved in the choice of food selection and amounts.

### **Diabetes Education Committee**

Responsibilities include preparation and mailing of pre-camp diabetes education packet (Joslin's Diabetes Teaching Guide, Atonement with Diabetes, any available hindi translations etc.), compilations of all diabetes education literature and teaching aids of all sorts (charts and diagrams, overhead transparencies, projection slides, audio cassettes, videocassettes, hindi/english hand outs, diabetes games), presentation of the twice daily pre scheduled diabetes education classes (selected formal courses DEP-001 to - 019 including invited speakers from outside the committee), individual patient/parent counselling as required, record keeping (diabetes education checklist, patient/parent education evaluation forms, diabetes education portion of case sheets and discharge summaries) and post-camp follow-up. They will procedure and maintain all the necessary hardware' : black/white board, writing materials and pens, overhead transparency projector, slide projector/screen, television and videocassette recorder and/or any other equipment deemed necessary by the committee.

### **Recreation Entertainment Committee**

They are the makers of fun and frolic. Responsibilities include planning, material procurement and conduct of free time games, movies, plays and other activities, and overall organisation of the planned afternoon outing, morning outing (picnic), and other prescheduled get togethers and social events (inauguration/introduction, talent search, campfire and farewell event, prizes etc.). Equal involvement of the diabetes campers and medical staff must be sought. Also camp photography and video filming.

### **Parent Patient Committee**

Responsibilities include providing precamp suggestions, guidance and assistance to the camp director and other medical staff on various relevant matters from the parent children point of view. They can volunteer for any other organisational activity of their interest including fund raising.

### **Camp Counsellors**

They represent the key/fundamental elements in the overall medical supervision and counselling, and will lead the functional camping unit referred to as the cabin. Each counsellor will be in TOTAL, COMPLETE and ROUND THE CLOCK charge of 7 to 10 children and youth with diabetes and with their medical/sociological background and leadership abilities, will be to these children their intimate friend, compassionate philosopher and a stern guide. Living in the cabin itself, he/she will be the primary link between the diabetic campers and the

rest of the medical staff. He/she will supervise the morning wake-up, assembly, meal gatherings, urine and blood glucose testings, insulin injection, insulin dose adjustments, cabin clean-up and retirement. He/she will conduct the midnight (0200 hours) flash checks for hypoglycemia for the children in their respective cabins every night (however, 2 or more counsellors can pool this responsibility by mutual arrangements and earn uninterrupted sleep on such days). He/she will be fully responsible for the completion of the case sheets, writing daily progress notes, deciding next day's insulin dosages and schedules (after bedtime urine and blood checks) and preparation of the initial draft of discharge summaries.

Camp counsellors can identify a qualified Senior Camper from among the members of the cabin, and seek his or her assistance/example in the successful execution of all the respective cabin's responsibilities (eg. assisting the counsellor in supervising the younger campers with urine and blood checks, insulin injections; guiding the new campers as they adjust to the novel environment and experience etc.).

Camp counsellor and all other physicians are requested to bring their medical bags to the camp.

### **Medical records**

1. Registration form (pre-camp): completed by the registration reception committee, stored in the infirmary.

2. Information kits (pre-camp): mailed by the registration reception committee to all prospective camp families.

3. Case sheets (pre-camp, camp, post-camp): Initiated at the time of the day 0 precamp medical review (AIIMS/PGIMER): jointly entered and maintained by the registration reception committee, medical care committee and counsellors; nutrition dietary committee and diabetes education committee also to enter their respective progress notes and plan; conveniently and safely stocked in the infirmary.

4. Medication cards: Prepared by the medical care committee and filed in the infirmary.

5. Diet cards: Prepared by the nutrition dietary committee and filed in the dining hall.

6. Patient log books: Entries done by the diabetic campers themselves, supervised by counsellors, kept in the camper's pocket or in the cabin.

7. Diabetes education program materials (check list, course handouts evaluation forms): Prepared and maintained by the diabetes education committee.



8. Patient feedback forms (camp, post-camp): Registration reception committee.

9. Parent feedback forms (camp, post-camp): Registration reception committee.

10. Discharge summary and recommendations (end-camp): Initial draft prepared by the camp counsellors, completed and finalised by registration reception committee, verified and countersigned by the medical care committee : original copy handed over to patient/parent: carbon copy retained with the case sheet in the camp medical file.

11. Home insulin adjustment algorithms: an appendix to the discharge summary (and handled as above Discharge summary and recommendations).

### **Activity**

Registration:

Precamp medical review (day 0):

Travel (onward):

Reception:

Inauguration and Introduction:

Typical day at camp:

Wake-up:

Breakfast:

Assembly:

(Medical staff meeting)

Free time—morning:

(Morning outing)

Diabetes education programme:

Lunch:

Free time—afternoon:

(Afternoon outing)

Dinner:

(Medical staff meeting)

Evening get-together:

Clean-up:

Retire:

Urine checks: Urine glucose tests to be done by the diabetes campers (double voided urines) themselves DAILY immediately before breakfast, before lunch, before dinner and at bedtime, and immediately entered in their diabetes log book. Urine ketones to be tested on sick days and as advised by physician.

(Note: Diastix will be provided during the camp)

Blood tests: Complete blood glucose profiles: before breakfast, before lunch, before dinner and at bedtime to be performed on all children on day 2 and day 4 (also 0200 hour blood glucose to be checked during the midnight between camp days 2 and 3). Spot blood glucose checks prn for suspected hypoglycemia on any day or for any associated illness.

(Note: Reflectance meters and the necessary blood glucose strips will be provided to each counsellor for his cabin's needs).

### **Insulin Injections:**

As prescribed by the physician, these will be administered before breakfast, before lunch, before dinner and/or at bedtime by the diabetic camper himself/herself, under the supervision of the counsellor of the respective cabin. Medical staff will administer insulin only to very young children not yet trained at self insulin administration, and during sick days. Next day's insulin dosages and schedules are decided by the counsellor of the cabin, and entered in the patient log book by the diabetic campers themselves after the bedtime urine/blood glucose checks.

(Note: The diabetic campers will bring their own insulin supplies and the necessary syringes and needles; however, the infirmary will have good stocks of the same for times of need and emergencies).

### **Snacks**

A round the clock self-service snack bar will be available. For diabetic campers the scheduled snack times will be around 1000, 1600 and 2200 hours.

### **Flash checks**

To detect unsuspected/silent nocturnal hypoglycemia, nightly rounds are made at 0200 hours (Or at 2400 and 0300 hours) using the flashlight technique. Children who respond by squinting or otherwise avoiding a light shined at the closed eyelids are merely asleep and need not be roused to exclude hypoglycemic coma.

Farewell event:

Travel (return):

Follow-up (post camp):

## **Locale**

Camp office;  
Assembly site:  
Common room/lecture hall:  
Dining hall:  
Snack bar:  
Kitchen and food store:  
Infirmary:  
(Medical record area)  
Cabins:  
Toilets and bathrooms:  
Outdoor areas:

## **DIABETES EDUCATION PROGRAMME**

<b>Course No.</b>	<b>Course title</b>
DEP—001	Diabetes an overview
DEP—002	Management of diabetes: meal plans
DEP—003	Management of diabetes: insulin injections
DEP—004	Management of diabetes: oral drugs
DEP—005	Management of diabetes: exercise and yoga
DEP—006	Monitoring diabetes control
DEP—007	Diabetes: special problems and emergencies (insulin reactions and ketoacidosis)
DEP—008	Diabetes: adjusting insulin dosage
DEP—009	Diabetes: sick day guidelines
DEP—010	Diabetes: personal hygiene and foot care
DEP—011	Living with diabetes
DEP—012	Diabetes and eyes
DEP—013	Diabetes and kidneys
DEP—014	Diabetes and hypertension/heart disease
DEP—015	Diabetes and nervous/muscular system
DEP—016	Diabetes and pregnancy
DEP—017	Diabetes in children, adolescents and youth
DEP—018	Diabetes: travel, camping and recreation
DEP—019	Diabetes: research and future

## CAMP FOR CHILDREN & YOUTH WITH DIABETES

Time	Day 0	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6
Date	23 May	24 May	25May :	26 May :	27 May	28 May	29 May
0600			Wake-up	Wake-up	Wake-up	Wake-up	
0700		B'fast (travel)	B'fast	B'fast	B'fast	B'fast	Arr. Delhi
0800	Precamp medical review :	Dep. C'garh	Asmbly	Asmbly	Asmbly DEP-005	Asmbly	
0900	PGIMER/ AIIMS		Free time	Free time	Morning Outing	Free time	
1000							
1100							
1200		Arr. Simla	DEP-001	DEP-003 -007		DEP-019 Parent seminar	
1300		Lunch	Lunch	Lunch	Lunch (picnic)	Lunch	
1400		Registrn Settle down	Free time	Afternoon outing : Simla	Free time	Pack-up Farewell	
1500							
1600						DEP Simla	
1700							
1800			DEP-002		DEP-009 -010		
1900		Dinner	Dinner	Dinner	Dinner	Dinner (travel)	
2000	Dep. Delhi	Inaugurtn Introduc	Talent search	DEP-006 -008	Campfire	Arr. C'garh	
2100							
2200		Clean-up Retire	Clean-up Retire	Clean-up Retire	Clean-up Retire		
2400		Flash checks	Flash Check	Flash Checks	Flash checks		
0200			Blood glucose				Home sweet home

Snacks: 1000, 1600 and 2200 hours

Urine and blood tests: before b'fast, before lunch, before dinner and at bedtime (Urine glucose tests daily; blood glucose profiles on days 2 & 4; spot blood glucose prn for suspected hypoglycemia or associated illness)

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