

SEVAK PROJECT: GUJARAT, INDIA & GUYANA



Sevak Project: A Model for Access to Care in Rural India & Guyana

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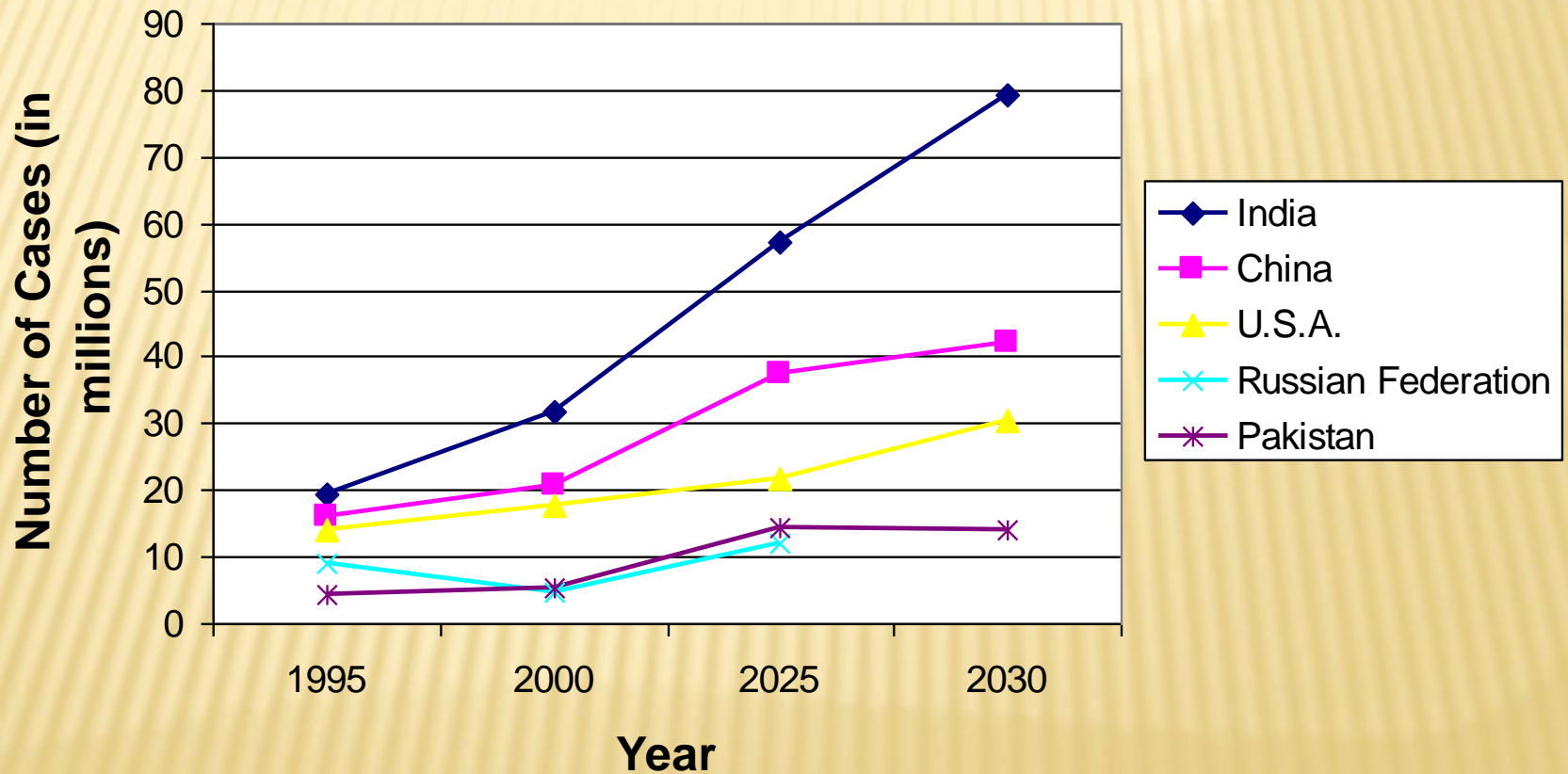
M.S.University, India

Bhartiya Seva Samaj, India

Sponsored by

Pfizer, Inc

Global Trends in Incidence of Diabetes Mellitus



DIABETES PROJECTS ON INDIANS IN INDIA AND INDIAN AMERICANS IN THE UNITED STATES

- ✘ Diabetes among Indian Americans (DIA Study)
- ✘ Diabetes Prevention and Management Projects in India
 - + (a) DPM in South India by Trained trainers & Peer Educators.
 - + (c) Diabetes and Nutrition Intervention in North India
- ✘ Chronic Disease Management Project in Gujarat (Sevak Project).

PREVALENCE OF DIABETES

	Fasting Blood Glucose Levels			A1c Levels			
US Sites (n=1038)	Number of cases	Mean	SD	Mean	SD	<8.0	≥8.0
Self-reported diagnosed T2DM cases	145	137.03	42.73	6.84	1.30	84.4%	15.6%
Undiagnosed cases	36	156.03	35.58	7.28	1.35	80.6%	19.4%
Prevalence of diabetes = 17.44%; prevalence of prediabetes = number of cases (342) = 32.9%							
Urban India (n = 508)	Number of cases	Mean	SD	Mean	SD	<8.0	≥8.0
Self-reported diagnosed T2DM cases	57	134.10	47.68	6.85	1.22	79.4%	20.6%
Undiagnosed cases	12	152.17	43.52	7.11	0.69	83.4%	16.6%
Prevalence of diabetes = 13.6%; prevalence of prediabetes = 23.4%							
Rural India (n = 598)	Number of cases	Mean	SD	Mean	SD	<8.0	≥8.0
Self-reported diagnosed T2DM cases	36	174.3	79.15	7.70	1.11	47.5	52.5
Undiagnosed cases	12	184.0	68.19	7.90	0.99	50.0	50.0
Prevalence of diabetes = 8.4%; prevalence of prediabetes = 12.5%							

OUTCOMES OF DIABETES AND CHRONIC DISEASE MANAGEMENT PROGRAMS

- ✘ Reduced chronic disease risk factors (diabetes, hypertension, obesity)
- ✘ Improved health behaviors
- ✘ Highlighted the success of community-based programs
- ✘ Improved outcomes among vulnerable populations.

PURPOSE OF SEVAK PROJECT

- ✘ Sevak Project was created:
 - + To screen villagers for diabetes, hypertension, obesity and other chronic disease;
 - + To provide lifestyle modification, sanitation, water purification and healthy environment education to prevent diseases and other ailments that can take away the livelihood of the farmers and laborers.

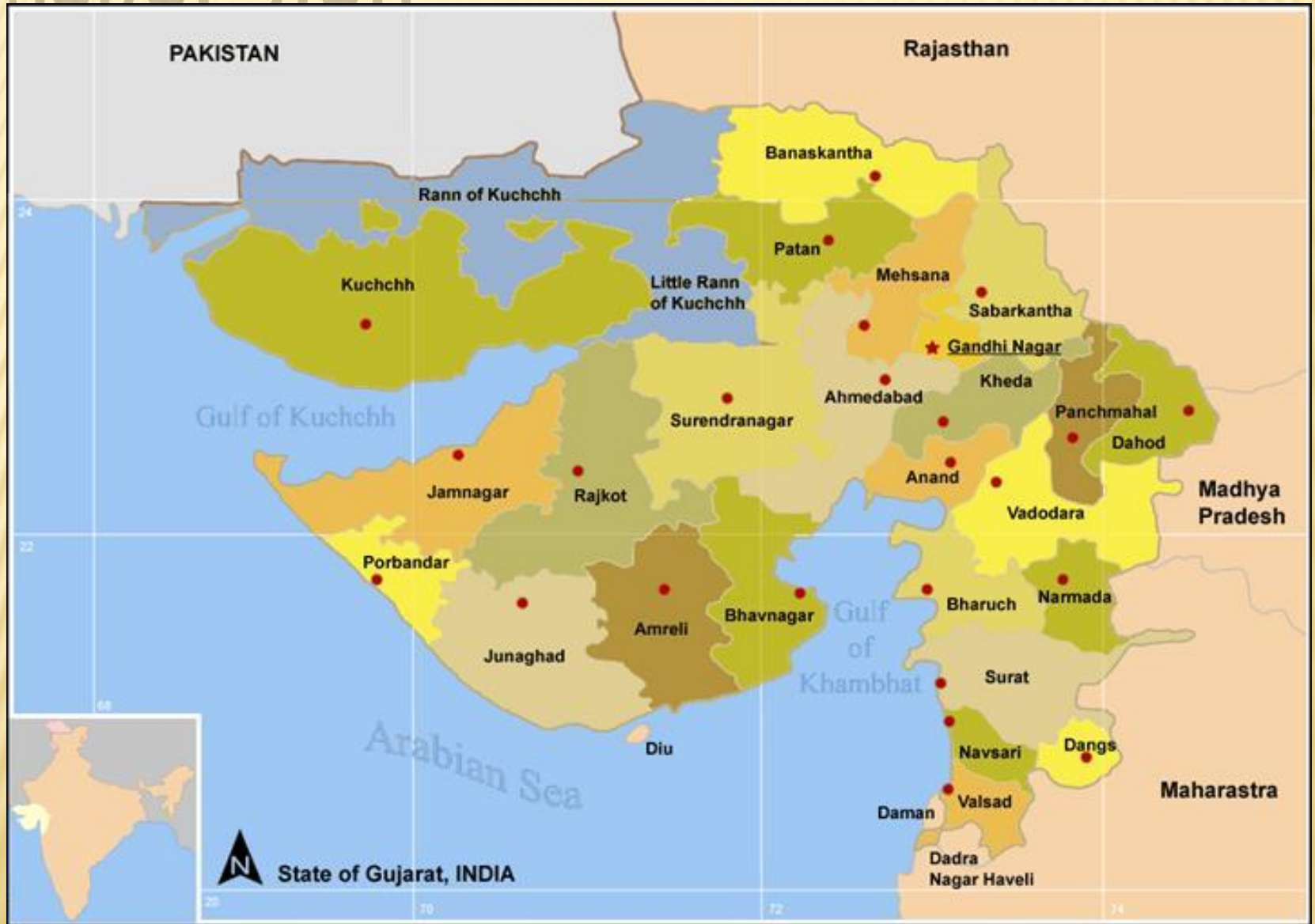
SEVAK

- ✘ Sevak Project is based on the U.S.Navy model of Independent Duty Corpsman
- ✘ A village per district (26) was selected from the state of Gujarat
 - + The average population of the village was about 1500-2500
 - + Sevaks were identified with average education of 12th grade and above

SEVAK

- ✘ For the project, Gujarat was divided into 4 regions and a coordinator with graduate level education was appointed for each one
- ✘ Sevaks' occupation was farmer, college student, or unemployed. They had to live in the village to participate in the project
- ✘ They were brought to Vadodara, provided with lodging, boarding and other support

GUJARAT STATE



SEVAK

- ✘ Government Medical College, Vadodara provided faculty for teaching
- ✘ Yoga and English classes daily each for one hour
- ✘ Afternoon, clinical lectures and practical
- ✘ One week in Ahmedabad for environment, sanitation and leadership education

SEVAK

- ✘ Graduation after 10 weeks with competency tests in health education, glucometers, BP and training the trainer.
- ✘ The Chancellor of M.S.University was the keynote speaker
- ✘ The project has been approved by the Chief Minister of Gujarat, Mr. Modi

SEVAK

- ✘ The sevaks are in their respective villages doing screening for diabetes and hypertension along with recording other health care problems
- ✘ They are required to educate the village folks about the merit of having house toilets and smokeless stoves ventilated to the outside

SEVAK

- ✘ The coordinators meet in Vadodara quarterly and are required to visit all the villages in their region once a month
- ✘ Sevaks meet in Vadodara once a year and brainstorm ideas and lessons learned. They also get refresher training in medicine
- ✘ Video teleconferencing and education of the villages is being looked at, but will require additional funding

SEVAK

- ✦ This was a three year pilot project:
 - + To demonstrate that preventive model works in keeping farmers at work without illness;
 - + To identify those with diabetes and hypertension and get them treatment to prevent complications
- ✦ Such a model has not been tried as a system
- ✦ The project is very successful and is now being continued indefinitely, it can be applied in any developing country—as it is being done in Guyana now

DR. T.G.PATEL WITH J & J REPRESENTATIVES



SEVAKS IN A REFRESHER CLASS







SEVAK CONVENTION DEC 2011



12/23/2011 12:45pm

GUEST LECTURER



FACULTY FROM THE MEDICAL COLLEGE



WITH THE MEDICAL SCHOOL DEAN & STAFF



INSULIN COOLER



COOKING STOVE IN THE HOUSE



SMOKELESS STOVE



SEVAKS LEARN TO MAKE SMOKELESS STOVE



ANEMIA CHART

તમારા લોહીની લાલાશ જાતે તપાસો

૩. કોણું લાલ લોહી ૫. કોણું ફિંકડું લોહી

૩. મુઠામ લાલ લોહી ૫. મુઠામ ફિંકડું લોહી

૩. લાલ લોહી ૫. ફિંકડું લોહી

૩. વજૂરજા લોહી ૫. અંકુરજા લોહી

અસીસામાં ખતે જશન ઝુક્યો તથા હોળ્યો અંધવ્યો ભાગ ઝુક્યો અને આનવાસના વંઝો સાચે સરખાવો

લોહીની દિલ્લાસાથી જાતી તકલીફો

૧. ઘોડું કામ કરતાં જ થાક લાગે. અમાઈન લાગે. ૨. વધુ કામ કરતાં કે મુઠામ લાલ લોહી જોઈને ઝુક્યો, પગ દુખે. ૩. અંકુર આવે, આંખે આંખાંડા આવે. ૪. મુઠામ ઓછું લાગે. ૫. અસીસામાં ઝાડી ઝાડીમાં ખાલી થઈ. ૬. સ્વખાવ થીડીયો થઈ જાય. ૭. સમખાવસ્યામાં અને સુવાવામાં તકલીફ આવે. ૮. સગવડો સાચું મેળવવા મુશ્કેલી પડે.

લોહી ફિંકડું પડવાના મુખ્ય કારણો

૧. અપૂરતો ખોરાક. ૨. વાદવાર ભેદીયા કે અન્ય ચેપી રોગો થવા. ૩. મોટા પાન વાળી આહારમાં વધુ ફિલસ આવવું. ૪. ઘણા ટાંપી સુવાવા કે વાદવાર કમુવાવા. ૫. કડમિયા (અંગીરી કુમ) કે તરખા-નસા કે અન્ય રીતે લોહી વલી જવાથી. ૬. વધુ પડતી આંકે કોઈ પીવાથી લોહાનનું મોખણ આવું થાય.

લોહી લાલ કરવાનો ઉપાય

૧. પૂરતો ખોરાક લેવો. ૨. લોહાનનું, વિટામીન સી, કોલિક એલેક્ટ્રીક, પ્રોટીન, કેલ્સી વગેરે પૂરતા પ્રમાણમાં મળવા જોઈએ. ૩. લોહી ફિંકડું પડવાના કારણો મોખી દુર કરવા. ૪. જમ કે કડમિયામાં માટે ગોળી લેવી, કેલ્સીયા અટકાવવો, વધુ માસિક આવડુ લોચ તો તેની સાવચાર કરવી, વગેરે. ૫. આખરું કોલિક એલેક્ટ્રીક ગોળી લેવી (લાલસા લાસમાં ન જવા દેવી, ત્યાં કજજ્યાત કે અન્ય આડ અસર થાય તો ગોળી અોટી લેવી). ગોળી સરાવતી દવાખાનામાં મફત મળે છે. ૬. ડાહ્યાના અપરનો ગોળીનું સગામ (વિવિધ કાર્બોન સાર ૩, ૬, ૫, ૫) ૭. લાસા ૨ (મિ.સા. અને વિવિધ જા. ૯ મો) ૮. લાસા ૩ (મિ.સા. લેવું જોઈએ.

લોહાનના વાળો ખોરાક

• રોટલી અપરની જુદીયત ૩૦ મિ.સા. અને સરાખી માટે ૪૦ મિ.સા. છે. • લીલા પાન વાળી આહારમાં લોહાનનું, વિટામીન સી અને કોલિક એલેક્ટ્રીક પૂરતું મળે છે. • લોહાનના માસામાં લાલ કે શાક કાચાથી ભરતુર લોહાનનું મળે છે. • વિટામીન સી માટે આખા, જામખા, રાંધણીયા અને પૂખ ઊંચળી છે. ૧૦૦ ગ્રામ આમ માસામાં માત્ર લોહાનનું ૧૦૦૦ છે. ૨. આસાઈ ૧૮૦ મિ.સા. (ફિંકડું જાય) ૩. કુશાચના પાન ૪૦૦ મિ.સા. (ફિંકડું જાય) ૪. મુઠામ પાન ૨૪ મિ.સા. ૫. કેલી પીયા ૨૦૦ મિ.સા. ૬. આખરી ૧૦ મિ.સા. ૭. મોટી પીયા ૩૦ મિ.સા. ૮. લીલા પાનવાળી આહાર ૫ થી ૧૦ મિ.સા.

સંસ્થાપના: માનવ્ય આરોગ્ય વનુંગ, ખલાસવા.



1/2/2006 20:08

SEVAKS PRACTICING WITH GLUCOMETERS



SEVAK VISITING PATIENTS IN KUTCH



SEVAK COLLECTING DATA



SEVAK CONDUCTING AN EDUCATION CLASS







GRADUATION CERTIFICATE



Certificate of Training

Texas A&M University

&

American Association of Physicians of Indian Origin (AAPI)

Mr./Ms. _____

Has completed the

SEVAK WORKSHOP

Date _____, 2010

A handwritten signature in black ink, appearing to read 'Ranjita Misra'.

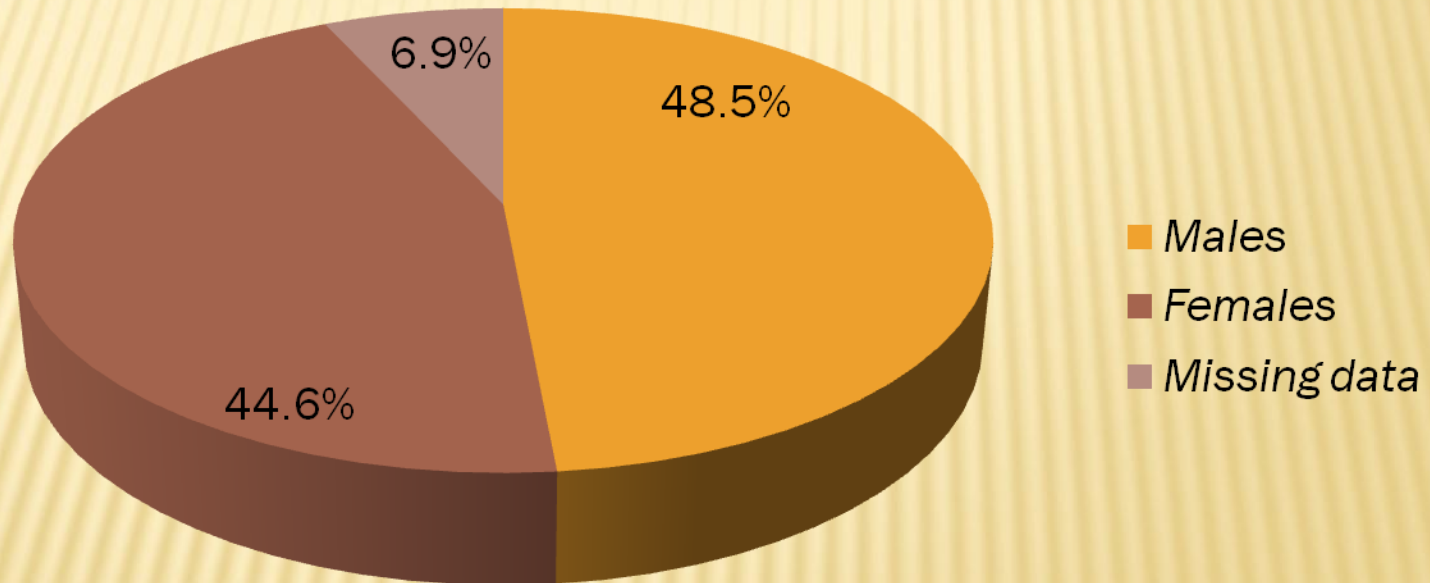
Dr. Ranjita Misra, Professor, Texas A&M University

Dr. T.G.Patel, Public Health Committee, AAPI

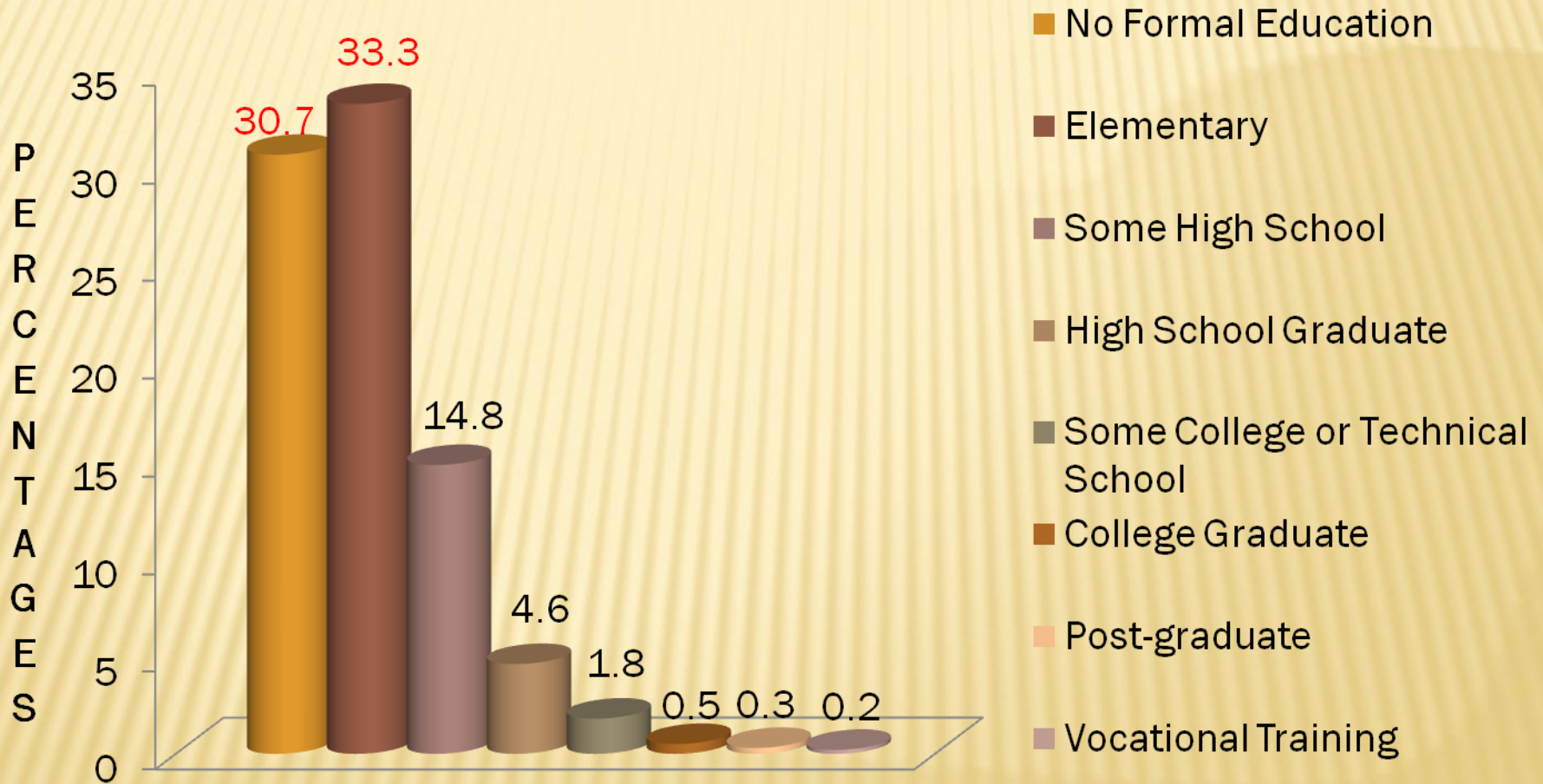


GENDER DISTRIBUTION

Total=28363

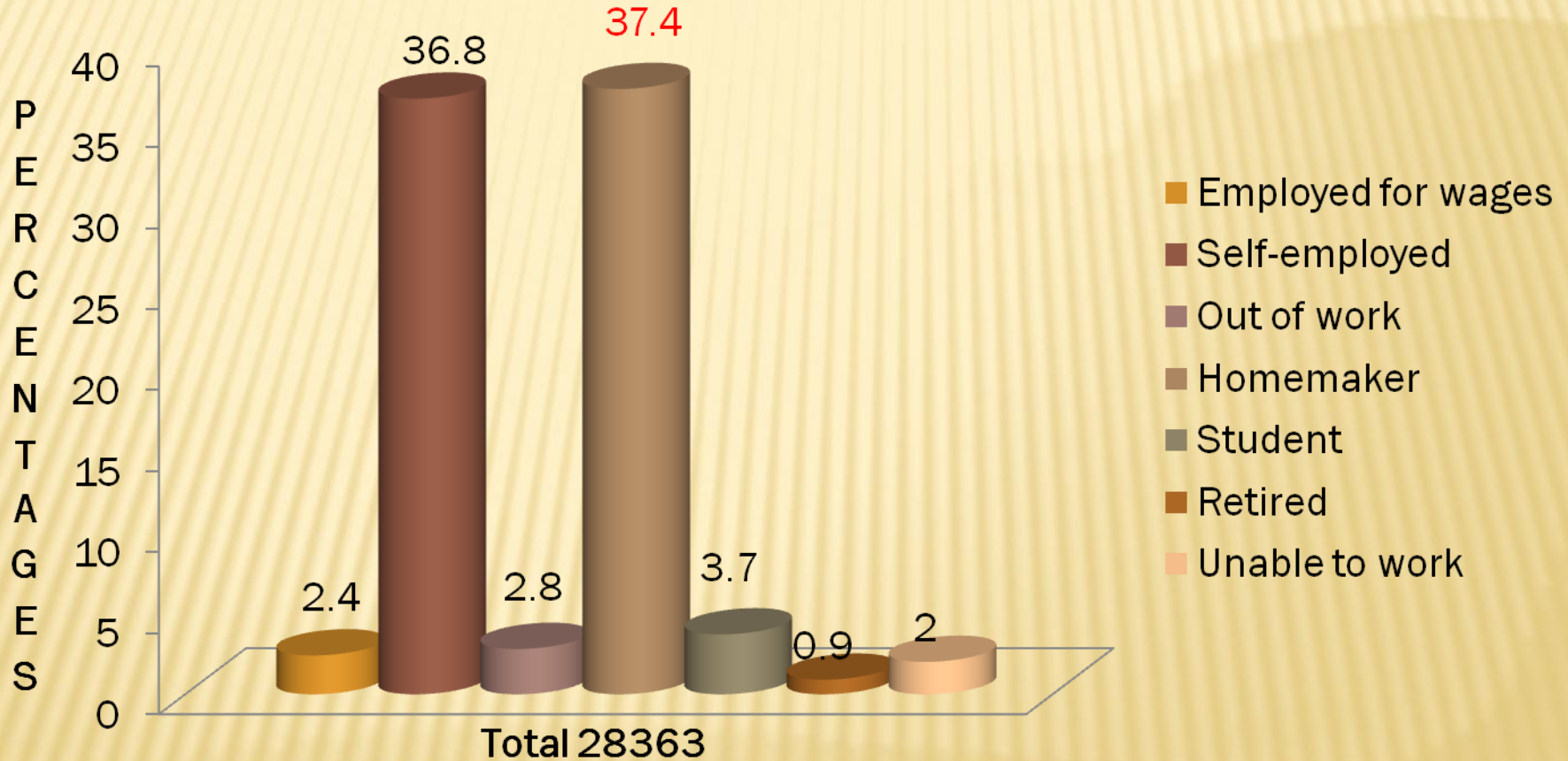


EDUCATIONAL BACKGROUND



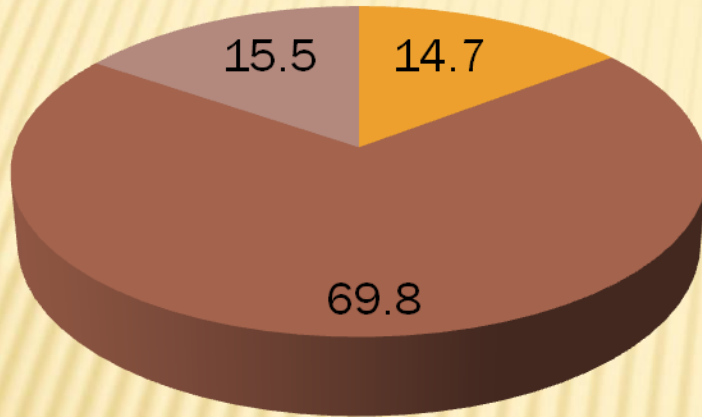
Total 28363

INCOME LEVEL



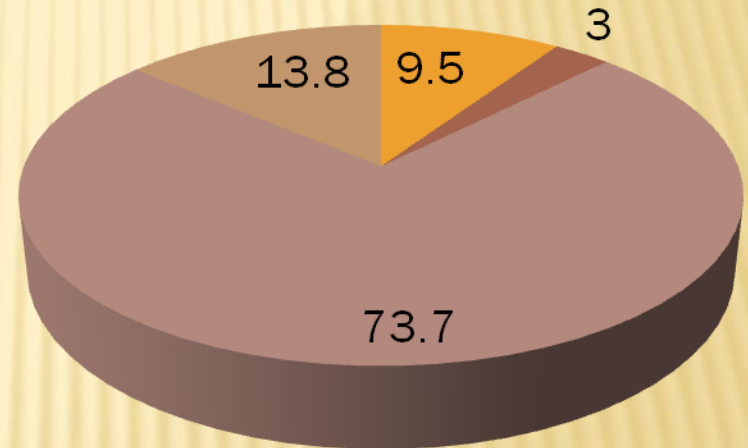
TOBACCO USE AND SMOKING

Tobacco use (percentages)



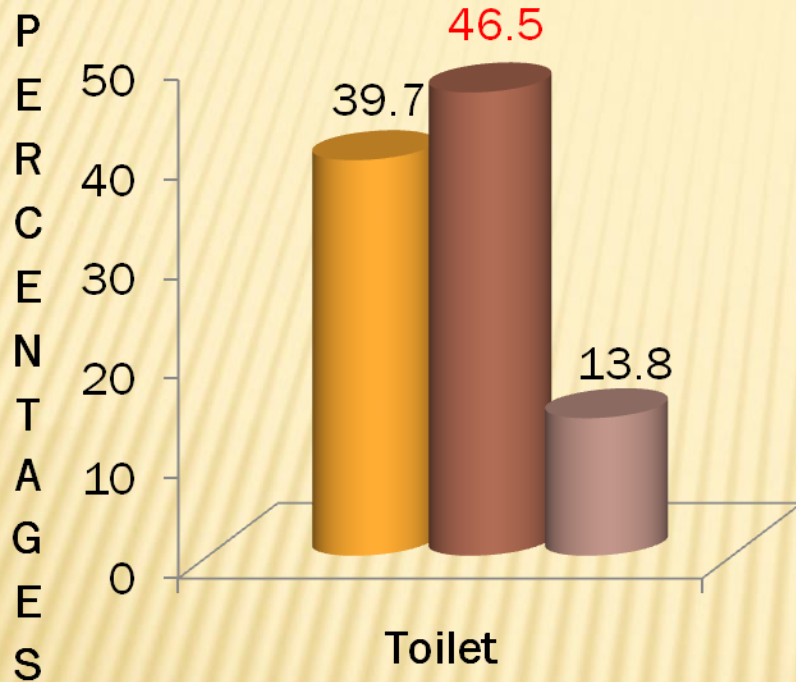
- Yes-14.7%(4163)
- No-69.8%(19797)
- Missing data

Smoking (percentages)

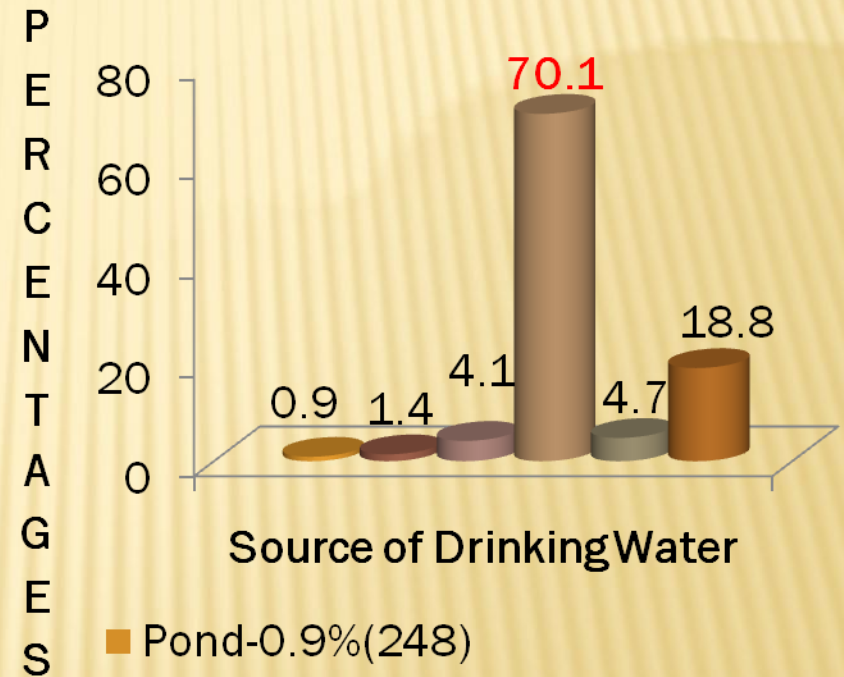


- Everyday-9.5%(2683)
- Somedays-3%(862)
- Not at all-73.7%(20895)
- Missing-13.8%(3923)

VILLAGE INFORMATION

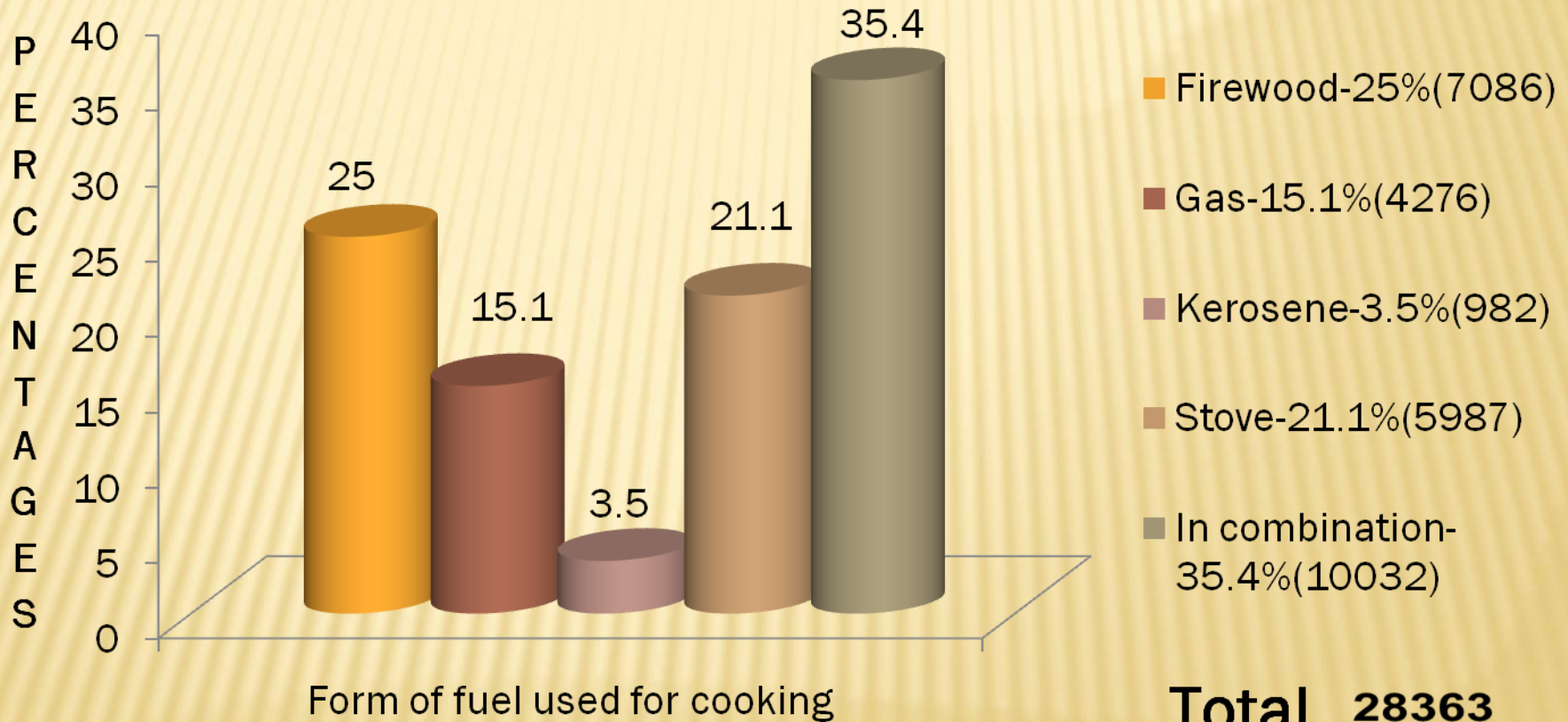


- Yes- 39.7%(11247)
- No- 46.5%(13190)
- Missing-13.8%(3926)

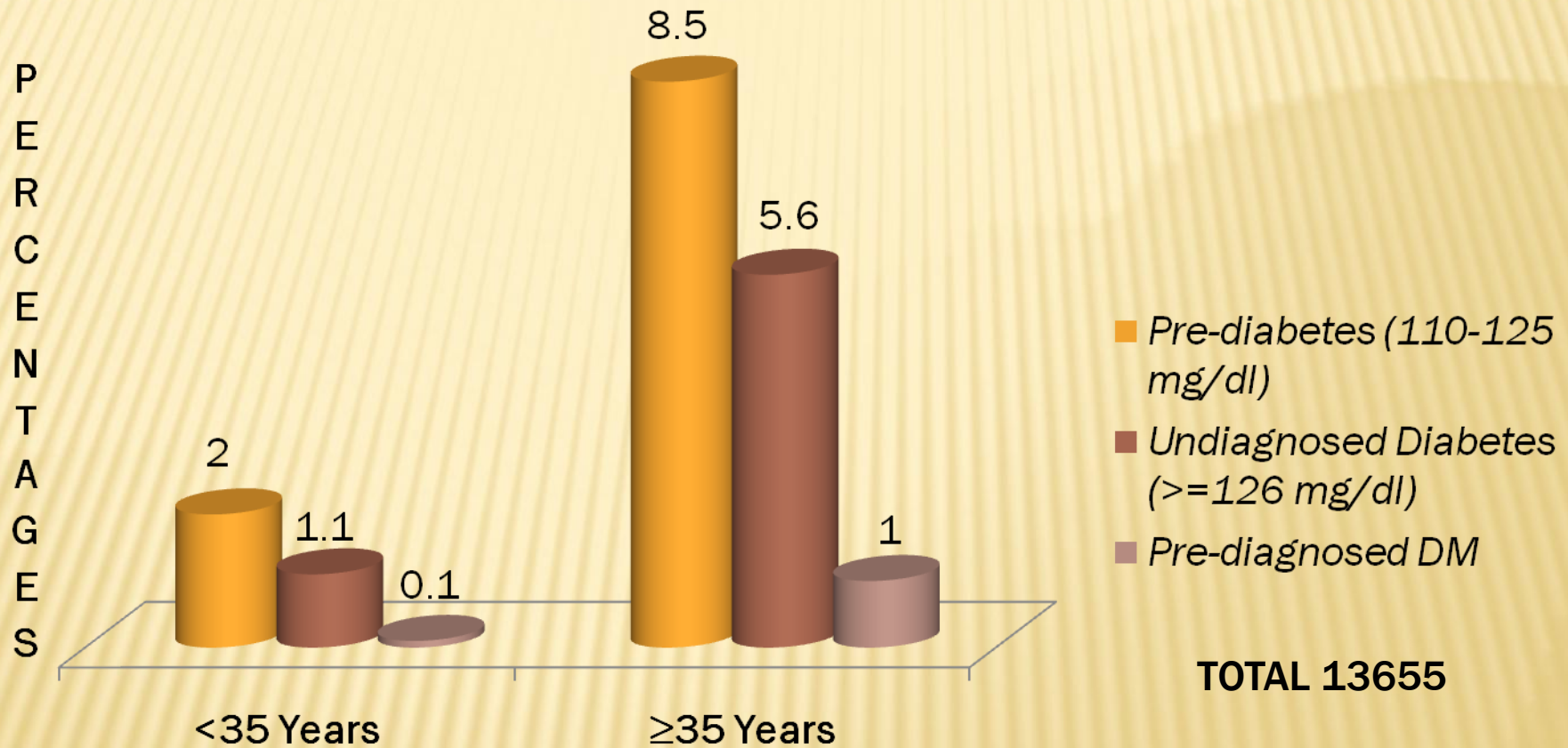


- Pond-0.9%(248)
- RO water-1.4%(398)
- Tube well-4.1%(1156)
- Village tank-70.1%(19879)
- Well-4.7%(1337)
- Multiple sources-18.8%(5345)

VILLAGE INFORMATION

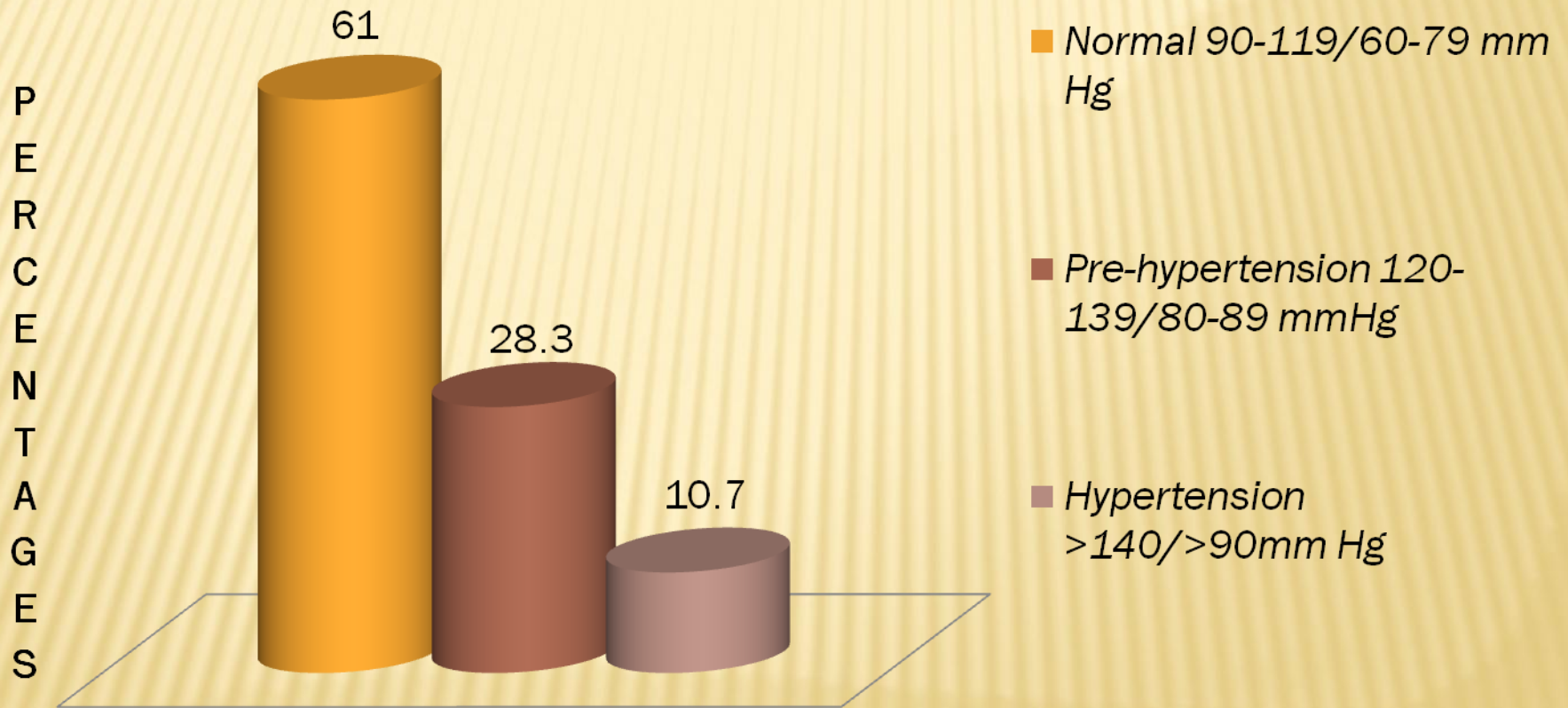


CHRONIC DISEASES- DIABETES



<35 Years: Pre-diabetes-(2%); Diabetes-(1.1%)
≥ 35 Years: Pre-diabetes-(8.5%); Diabetes-(5.6%)

CHRONIC DISEASES-HYPERTENSION



TOTAL 27716

SEVAK ZARA PROJECT: GUYANA

SEVAK ZARA PROJECT GUYANA

- This project is sponsored by philanthropist Mr. George Subraj of New York
- It is similar to the Gujarat Sevak Project
- Training in anatomy and physiology undertaken by the local teacher who was provided the materials from the US. Clinical and practical training was given when I went to Guyana.
- Swami Aksharanand who runs the Saraswati Vidya Niketan (SVN) very supportive

SEVAK ZARA (CONT)

- Six Sevaks volunteered from the Saraswati Vidya Niketan run by Swami Aksharanand--two teachers and four senior students.
- There is a critical need for such a project as people are poor and benefit immensely from such a project.
- 51% of the population is third generation Indian, 48% African descent, and rest are natives.

SEVAK ZARA (CONT)

- ✘ Dr. Rahul Jindal who started the transplant program in Guyana got me involved to start the Sevak Project.
- ✘ Mr. Subraj saw the potential of this project to reach a wider population and the long term benefits that could be had. He agreed to bear the entire cost. He has no house in Guyana but has love for the people and wants to give back.

WITH MR. GEORGE SUBRAJ IN FRONT OF SVN SCHOOL



DR. JINDAL, DR. PATEL, AND MR. SUBRAJ WITH THE SEVAKS



TEACHING TO DO BLOOD SUGAR CHECK



SEVAKS LEARNING TO DO BP CHECKS



GRADUATES WITH FAMILY AND STUDENTS



SWAMI ADDRESSING THE GRADUATES



PARMESHWARIE RECEIVING CERTIFICATE FROM SWAMIJI AND MR. SUBRAJ



ROAD TO SEVAK AMIT'S HOUSE



AMIT WITH MOTHER AND GRANDMOTHER



AMIT DOING HIS FIRST SURVEY



FRONT OF AMIT'S HOUSE



NEHRU DOING HIS FIRST SURVEY



CANAL ALONG THE ROAD



PARMESHWAR IS A PART TIME PRIEST AT THIS TEMPLE



SEVAK PARMESHWARIE WITH MOTHER AT HOME



PARMESHWARIE'S HOUSE



SEVAK RAJNIE WITH GRANDFATHER, GEORGE, A PATIENT, AND ME



RAJNIE'S FAMILY



RAJNIE'S NEIGHBORHOOD



SEVAK ROOPA DOING HER FIRST SURVEY



ONE OF THE TYPES OF TOILET USED IN GUYANA



WWW.SEVAKPROJECT.ORG

THANK YOU