#### BLDE University in partnership with Emory University presents:

# B.E. Impactful

## Social Determinants Newsletter

July 2013

Since 2010, a research team partnership has developed and thrived between the Department of Community Medicine (BLDE University) and the Rollins School of Pubic Health (Emory University). Drs. Solveig Cunningham and Shailaja Patil, professors from each university have united over common research interests in community health and social determinants. This partnership manifested when Dr. Shailaja Patil, Professor of Community Medicine at BLDEU, was selected for a National Institute of Health (NIH) fellowship through D43 Grant titled 'Millennium Promise Awards: Non-communicable Chronic Diseases Research Training Program' awarded to Center for Chronic Disease Control (CCDC), New Delhi, India. Eminent researchers Dr. K.M. Venkat Narayan from Emory and Dr. Nikhil Tandon from the All India Institute of Medical Sciences (AIIMS), New Delhi are the Principal grantees of the D43 grant from USA and India respectively.

As part of her fellowship at Emory, Dr. Patil developed a research proposal and further improvised it under the guidance of her mentors Dr. Cunningham at Emory and Dr. Dorairaj Prabhakaran at CCDC, New Delhi. In 2011 the proposal was awarded a prestigious NICHD, USA grant to implement the study "Home environment and adolescent unhealthy weight status - a School based study in Bijapur." This mentor—mentee partnership has prioritized the adolescent health study in Bijapur, with further intentions to broaden the research focus to examine social determinants of health in general. Currently, a follow-up of this original study is being implemented with the help of a Global Health Institute (GHI) team from Emory.

This newsletter is one of the first attempts to review the success of the collaboration thus far, and will share our vision to build an Interdisciplinary Research Centre focusing on social determinants at BLDE University in Bijapur, Karnataka. This center will be a unique asset to both the North Karnataka region and the whole of India, being that there are so few such research centers currently in existence. Read more to find out what has already been accomplished through this collaborative partnership and what is to come in the near future.

## BRAINS AND BEAUTIES OF THE COLLABORATION:

Dr. Shailaja Patil, MD



BLDE's very own - Professor of Community Medicine. She has been spearheading this collaboration from the beginning bringing in initial funding and volunteers. She aspires to build the Institute to improve the health of her community

and build the research capacity at BLDE University. Her knowledge of survey implementation in the field and of community health are strengths for the collaboration.

#### Dr. Solveig Cunningham, PhD

Dr. Cunningham is an assistant professor and researcher within the Department of Global Health at the Rollins School of Public Health, Emory University, USA. She



has worked closely with Dr. Shailaja to conduct Wave 1 and 2 surveys, assemble a research team from Emory, and secure funds. Her expertise is in research methodologies and data analysis.

## What has the team already accomplished?

In 2012, the original survey team consisting of Dr. Shailaja & Dr. Solveig Cunningham as Investigators, Dr.

M.C.Yadavannavar, Professor, Department of Community Medicine as Senior Research Associate, and Dr. Krishnaveni GV as a consultant successfully led a team of 14 interviewers to collect data on the role of the family environment in unhealthy weight among adolescent boys and girls. A representative school-based survey of adolescents was fielded in 6 schools (3 private and 3 public) all across the city of Bijapur. The sample consisted of 407 adolescents, their mothers/caregivers, and one school-aged opposite-sex sibling. The survey received an outstanding response rate from schools and families. Data analysis is underway and two graduate students from Emory utilized study data for their thesis topics to graduate in May 2013. The research team envisions turning this piloted study into a longer-term cohort study to be able to capture and understand changes that may be occurring over time in these adolescents' diet and physical activity behaviors. Such research efforts will help illuminate the relationship between the rapid environmental changes believed to be occurring in this region and adolescent nutrition. Knowledge gained can be used to build public awareness, create educational curriculum for children in Bijapur, influence policies, and ultimately protect and improve the health of adolescents and their communities at large. It will also bring notoriety to BLDE University, which will likely benefit Bijapur for years to come.







## Why has Bijapur been selected as the place for research and as the future site of the Research Centre?

Bijapur is categorized as socio-economically underdeveloped but is undergoing major economic, social, and cultural changes as a result of globalization. The city has a population of 350,000 and is an emerging regional leader in educational and economic development. While globalization produces immense opportunities for lifting people out of poverty and improving health through economic development, it can also be accompanied by considerable disparities with consequent impacts on health unless it is well managed. Bijapur, being an underdeveloped part of Karnataka, already suffers from massive socio-economic disparities but offers huge opportunities for understanding the dynamics of such disparities so that effective solutions can be found.

The environment of Bijapur city is believed to be rapidly changing moving from traditional to modern ways in lifestyles, diet and physical activity habits. This process has been coined as 'nutrition transition' and is contributing to a double burden of persisting underweight and emerging obesity among children.

A key to addressing and improving health is good research aimed at solutions. For example, how much underweight is present? How is the obesity epidemic impacting Bijapur? Which groups are affected and why? How much of a co-occurrence is there of chronic non-communicable diseases (NCDs) like diabetes and obesity with the unfinished agenda of under-nutrition and infections? What can be done to reduce the emerging NCDs burden? Questions such as these need substantial local research – an opportunity for institutions such as BLDE to be involved in. With overwhelming support from administration, BLDEU offers a prime location for research and a perfect site for a future envisioned Research Centre.

## Messages of support from BLDE University administration:



Mr. M.B. Patil
President of BLDE

#### Words from Mr. M.B. Patil, President of BLDE:

"Our saints and sages have proclaimed 'Na hi jnanen sadrasham' (Knowledge is supreme) and 'Janana vijanana vimuktaye' (Knowledge liberates)."

"I am very happy that students from Emory University, USA are with us at BLDE University to undertake a study on adolescents' health."

"I am sure that the ongoing collaboration between BLDE and Emory will continue to grow stronger and culminate, creating an environment in which the envisioned 'Bijapur Centre for Health Research' at BLDE University can be established in the near future and thrive for many years to come."



Dr. M.S. Biradar Principal of BLDE University

#### Words from Dr. M.S. Biradar, Principal:

"I am happy that a young team of Emory students have been selected to work under the direction of Dr. Shailaja and Dr. Solveig to address these social determinants of health and that they are working together as a part of this ongoing BLDE and Emory University Collaboration."

"Rapid economic growth in India is impacting social and health status of the people."

"It is exciting to witness the beginning foundations of a multi-disciplinary research center with a focus on bio-social determinants of health."

#### Words from Dr. Tejaswini Vallabha, Vice Principal:



Dr. Tejaswini Vallabha, Vice Princiipal of BLDE University

"It is pleasure to have students from Emory University here working on this project and a great honor to see the team being led by such prominent researchers, Dr. Solveig Cunningham and Dr. Shailaja Patil."

"Globalization and access to information and materials have induced rapid changes in very short period of time and we are excited to know how this is impacting adolescent health currently and in later years."

"I hope their visit and work will enhance relations of both Universities and form base for establishing Centre for Social Determinants at our University under the able guidance of Professor Venkat Narayan."



Dr K.M Venkat
Narayan, Professor
of Global Health
Department, Emory
University, visited
BLDEU back in
Novemeber of 2012
and delivered a
guest lecture.

#### A word from Dr. Venkat:

Over the past few years, BLDE and Emory University in Atlanta, USA have been developing some active collaboration. This all began with Dr. Shailaja Patil visiting Emory as a NIH-funded scholar, and developing a long-term relationship with her mentor at Emory, Dr. Solveig Cunningham. Since then, Drs. Patil and Cunningham have developed a NIH-funded project on childhood obesity in Bijapur by surveying children in schools. Others from Emory have also visited BLDE, and assisted in stimulating research interest.

One of the highlights is the strong institutional support for research at BLDE. The Vice Chancellor, Dr. B.G. Mulimani has championed the cause actively and lent his full support. He is committed to the vision of seeing a world-class inter-disciplinary research Centre of biosocial determinants of health happen at BLDE. This is very exciting, and my colleagues and I look forward to building a long-term relationship with BLDE around this vision.

On a more personal note, my two visits to BLDE have both been memorable and I cannot wait to visit again. I have been most impressed with the institution's commitment to education and research, and have also much enjoyed the warm hospitality shown to me by Dr. Mulimani and his team. I have also been impressed with the commitment of several of the young doctors at BLDE, and wish for more of them to become active in research. BLDE has a bright future, and can easily become a research pioneer to address the health needs of an underserved population. I wish BLDE a huge success.

Sincerely, K.M. Venkat Narayan

#### What's happening now (June-July 2013):

A multidisciplinary team of students from the Global Health Institute (GHI) at Emory University arrived for a 7 week summer research experience at BLDE University to assist with the follow-up survey and get hands-on experience conducting fieldwork in Bijapur. Led by Dr. Shailaja Patil, the "wave 2 survey" is the second wave of data collection, currently being implemented by the team. Adolescents currently in 10<sup>th</sup> standard who participated in the original survey in early 2012 are being interviewed. A future attempt to contact other adolescents in the original survey will also be made.

Apart from wave 2 survey, the GHI team members each developed their own individual projects to strengthen wave 1 and wave 2 survey data. *Alex Tran* is using GIS to map food outlets in Bijapur city and homes of adolescent respondents, to see if there is a relationship between adolescent weight status and food availability near their houses and schools. *Sue Gloor* is creating an educational toolkit on nutrition and physical activity for healthy adolescents for use in schools. *Amanda Maxfield* is using anthropological methods to implement a survey exploring socio-cultural values that adolescents attribute to food. *Sara Thorpe* is using "photo voice" to explore food values by distributing one-time-use cameras to students, asking them to take pictures of food and activities and

describe these items. Jamie Ports is surveying physicians to understand how their practice is being affected by changes in adolescents' weight and to gain their perspectives on why such changes may be occurring.



In addition to the GHI team's efforts, *Nida Shaikh*, a PhD student at Emory University was awarded a NIH Fogarty Global Health Fellowship to spend a year at BLDE building on the ongoing collaboration between Drs. Patil and Cunningham. A native of Pune, Nida is using her knowledge as a Registered Dietitian to understand the changing food and physical activity environment among adolescents by developing and testing a tool that can measure the 'nutrition transition'. Being able to measure the nutrition transition



with this tool would benefit future research. In addition, as a Research Coordinator, she is assisting in the implementation and data analysis of the Wave 2 follow-up survey. She has been responsible for some of the GHI team's logistical planning and well-being in Bijapur.

## Want to know more about the Universities that are involved?

### **BLDE University**

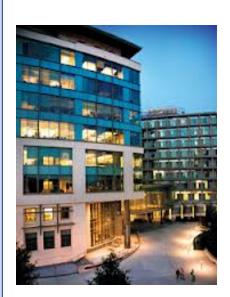
BLDE University is one of the most reputable universities in the state of Karnataka, India. Much like Emory, it is home to undergraduate, postgraduate, and PhD programs. The University's sprawling campus is located in the city of Bijapur and is a renowned educational society, running more than 75 educational institutions. One of the constituent colleges of BLDE University, Shri B M Patil Medical College Hospital & Research Centre is quickly becoming one of India's most notable research universities with highly qualified and experienced research oriented faculty. The University's emphasis on community and research explains its success in developing a fruitful collaborative effort with Emory University's Rollins School of Public Health.



BLDE University, Bijapur, Karnataka, India

### **Emory University**

Emory University, located in Atlanta, Georgia (USA), is comprised of internationally acclaimed undergraduate, graduate, and professional schools and is regarded as one of the region's leading health care systems. Collaborations both internationally and amongst its own schools, centers, and partners help to distinguish Emory as one of the nation's leading research universities, and more than \$500 million in research funds alone are generated annually. One of Emory University's graduate level schools, Rollins School of Public Health, provides students with the opportunity to pursue degrees focused on public and global health. The school's location in Atlanta, referred to as the "Public Health Capital of the World," is also home to a multitude of public health related institutions, such as the U.S. Centers for Disease Control and Prevention, CARE, and numerous state and regional health agencies. The public health school comprises six academic departments: behavioral sciences and health education, biostatistics, environmental and occupational health, epidemiology, health policy and management, and global health.



Rollins School of Public Health, Emory University, Atlanta, USA

#### Future Plans...

With a vision of expanding research capacity, Dr. Shailaja Patil invites YOU to join her in her efforts to work towards improving health of the community on a much a broader scale. While she loves the idea of assisting patients as a physician and teacher of community health, she realizes that there are larger factors that are affecting their health and these factors are often outside of their control. These things include, but are not limited to, environmental and socioeconomic factors such as poverty, pollution, contaminated drinking water, and food access. All these factors have channeled her efforts towards developing a Research Centre. The Centre will allow other physicians, researchers, professionals, and students to come together and learn about how they can improve the health of their community and combat these types of "social determinants."

While BLDEU supports this Research Centre and several collaborations are already in place, still much more needs to be done to see this vision into reality. A board would first be assembled to support the Centre, and funds will need to be sourced through grant writing. Once these are secured, the Centre will need a team of people, if not most of the community, to lend their constructive assistance.

## Are you wanting to b.e. impactful? We are recruiting help for the following:

- ✓ Do you want to assist in creating the Institute?
- ✓ Do you consider yourself to be an exceptional leader and want to be associated with the future Research Institute?
- ✓ Are you interested in assisting with research and data analysis?
- ✓ Do you have skills in GIS mapping and want to assist with data analysis?
- ✓ Do you have/want to gain skills in grant writing?

#### ... Then please contact us!



#### **Contact Information**

Dr. Shailaja S. Patíl, MD Phone: 91-8352-262770 Extn : 2155,2154 (office) Email: shailaja.dr@gmail.com

Department Of Community Medicine BLDE University Shri B.M.Patil Medical College Bijapur, Karnataka, India

#### Fun fact:

The "B.E." in the newsletter
title represents the
collaboration between BLDE
(B.) and Emory (E.)

#### What are social

determinants:

The social determinants of health are the economic and social conditions – such as the conditions, in which people are born, grow, live, and work – that influence peoples' health status and risk for disease. These conditions are shaped by the unequal distribution of money, power, and resources.

