Division (delete as appropriate): Health Sciences

Project Title: Under- and over-nutrition amongst young adolescents in a slum

Application deadline: 15th June 2018

Degree (delete as appropriate): PhD

Mode of Study (delete as appropriate): Full time

Project suitability (delete as appropriate): Home / EU

Supervisor(s): Professor Paramjit Gill (UK)
Dr Romaina Iqbal (Pakistan)

Funding body (please tick as appropriate): Other (please specify)
University of Warwick

Has the funding been awarded?: Yes

If the project requires consumables, please specify the amount and who is responsible for covering the cost:
Reasonable consumables relating to project fieldwork will be funded by the NIHR Global Health Research Unit, subject to approval.

Project Summary including key research questions, aims and anticipated outcomes (max 300 words)

There are 1.8 billion adolescents aged 10-19 years representing a quarter of the world’s population with 89% living in developing countries. This is a dynamic life stage and period of cognitive and physical development. Although there are existing interventions focusing on children and adults, few are directed specifically at young adolescents.

Pakistan is undergoing a demographic transition and adolescents (young people aged 10-19 years) are a burgeoning sub-group of the population, and are facing a range of health, environmental and social challenges. In Pakistan, as in many countries, the focus on health policy is shifting from infectious diseases in early life to non-communicable diseases (NCDs) in adults. Further, there is dearth of data on adolescent health in Pakistan on determinants of NCDs. For example, adolescent overweight and obesity has increased markedly on a global scale but data are sparse amongst Pakistani children.

Low levels of physical activity (PA) and high levels of sedentary time are independent risk factors for various NCDs, and are associated with a higher risk of obesity, metabolic abnormalities, poor academic exam performance, and psychological difficulties in children and young adolescents. These behaviours track into adulthood, highlighting the need to identify strategies to increase PA and reduce sedentary time in these age groups.

Our initial research questions for this cross sectional study amongst 11-13 year old children include:
| How common is under-and over-nutrition? |
| Does nutritional status vary with socio-economic status? |
| What is the level of physical activity and sedentary time? |

**Describe the methodology and techniques to be employed (max 200 words)**

This PhD will be based in the NIHR Global Health Research Unit on Improving Health in Slums that is addressing health services in slums in 4 countries (Nigeria, Kenya, Pakistan, Bangladesh). The student will be embedded in an interdisciplinary, international team and have access to training programmes.

It is envisaged that the project will entail:

- Systematic review
- Cross sectional data collection and analysis

As data collection will be undertaken in Karachi, Pakistan the student will need to be willing to learn the local language (Urdu).

Approved by Academic Lead for Research Degrees

Signature Date 21/02/2018