Research papers for health activity recognition:

1. **MyBehavior: Automatic Personalized Health Feedback from User Behaviors and Preferences using Smartphones –** Tanzeem Choudhury.

***Objective:*** A deeper look into physical activity and food intake data can reveal patterns of both healthy and unhealthy behavior that could be leveraged for personalized feedback by using smartphones sensors by two decision models i.e., MAB and pareto-frontier.

***Red Flags:*** Using MAB is online learning algorithm that learns adapts and decides simultaneously but relatively less data since they are not heavily parameterized.

1. **Towards Health Recommendation Systems: An Approach for Providing Automated Personalized Health Feedback from Mobile Data -** *Tanzeem Choudhury.*

***Objective:*** A deeper look into physical activity and food intake data can reveal patterns of both healthy and unhealthy behavior that could be leveraged for personalized feedback by using smartphones sensors by two decision models i.e. Markov decision process(MDP) and pareto-frontier.

1. **Predicting “About-to-Eat” Moments for Just-in-Time Eating Intervention -** *Ran Gilad-Bachrach.*

***Objective:*** A wearablesensingframework that predicts “About-to-Eat” moments and the “Time until the Next Eating Event” by using an array of sensors those are currently not available in a single device.

* Microsoft Band - continuously captured users’ physical movement
* An Affectiva Q sensor - measures electro dermal activity,
* A wearable microphone - continuously monitors chewing and swallowing sounds and detects current eating events.
* Android smartphone application - continuous and passive capture of GPS location and for recording self-reports before and after every eating event.

1. **Machine Intelligence in Healthcare and Medical Cyber Physical Systems: A Survey –** *Tolga Soyata*

***Objective:*** To improve healthcare by providing accuracy and reduce costs for patients through body-worn sensors that can acquire data, transmit to the cloud and process it using machine intelligence. The following concepts are completed reading:

1. Introduction - Vivya

2. Conceptual diagram for using machine intelligence in healthcare – Vivya

3. Feature Extraction - Vivya

4. Feature Selection – Jibal

5. Computational Models – Vivya & Jibal

6. Model Evaluation – Jibal