Has the implementation of the Multi-disciplinary team to HIV care led to better patient outcomes with regards to viral loads?

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Background
The MDT approach was introduced to HIV care in the year 2012. This was in part due to successes noted in the approach towards other diseases such as cancer. This involved fields of care including for example psychiatrists, gynaecologists, sexual health and holistic support. After searching through Medline, Embase and consulting the NICE guidelines, it was found that there is little evidence showing the benefit of the HIV MDT approach within the UK health system, therefore this project is aimed to try and find out if the implementation has improved outcomes.

Objectives:
The objectives of the study were to look and see if there were any improvement in the outcomes for HIV patients. It was decided that the best way to do this was to analyse viral loads and see if there was a bigger decrease in viral loads in patients who had undergone the MDT approach. Patient population that was looked at were patients found in the database of Castle Hill Hospital in Hull.

Methods
In order to look at the effectiveness of the MDT, analysis was conducted of 49 randomised patients’ notes after the year 2012 (21 of these patients had undergone an MDT approach, 28 had not) and 39 randomised patients before the year 2012. The viral load at the start of treatment was looked at and the same again after 1 year of treatment for each patient. Other factors also looked at include: drug regimen, race, sexual orientation and age.

Results
Out of the 88 patients, 6 patients were excluded who underwent the MDT process and 8 non-MDT, as 12 of these patients were not officially diagnosed and were given prophylaxis treatment and the final patient became pregnant, therefore her treatment plan changed. Of the patient population looked at:

• 69 patients were under the age of 50 (78%) and 19 aged above 50 (22%).
• 57 patients were male (65%) and 31 were female (35%).
• 63 patients identified as heterosexual (72%), 9 as homosexual (10%), 3 MSM (3%) and 13 (15%) did not specify.

There seemed to be a greater decrease in viral load in those patients who had undergone the MDT process. This was however not a significant result with a p-value of 0.08.

• The average viral load results of patients who underwent MDT was a starting viral load of 79,484 and 27 (IU/ml) after 1 year of treatment.
• The values of non-MDT patients being 468,584 and 632 (IU/ml) respectively.

Discussion
The results showed that MDT led management did not significantly cause a greater decrease in viral load after 1 year compared to non-MDT led management. However there seemed to be a trend suggesting that MDT management led to a greater decrease in viral loads. This study did not measure overall wellbeing of the patients which is discussed at the MDT. It is also important to note that some of the patients who were not part of the MDT had been treated before 2012 and this means they were more likely to be treated with less effective treatments due to advances in HIV care.