



Exploration of factors facilitating adherence to anti-tuberculosis treatment in Yerevan, Armenia

A qualitative study

Z. Grigoryan¹, R. McPherson², Ts. Harutyunyan¹, N. Truzyan¹

¹School of Public Health, American University of Armenia, Yerevan, Armenia; ²Bloomberg School of Public Health, Johns Hopkins University, USA

Introduction

Adherence to TB treatment is “the extent to which TB patient’s history of therapeutic drug-taking coincides with the prescribed treatment” (WHO).

Increasing rates of drug resistant cases and low adherence to anti-tuberculosis treatment led to TB becoming a major public health concern in Armenia. The research team has approached the issue of non-adherence to anti-tuberculosis treatment from the other side to identify and characterize factors that facilitate adherence to anti-tuberculosis treatment.

Conceptual framework

The PRECEDE part of the PRECEDE-PROCEED model developed by L. Green was used as a conceptual framework aiming at studying predisposing, enabling and reinforcing factors that facilitate adherence to anti-tuberculosis treatment.

Methods

Sixteen in-depth interviews were conducted with adult (18 years and older) Armenian former drug sensitive TB patients who both adhered to and successfully completed anti-tuberculosis treatment in 2012-2014. To validate the findings of preliminary analysis and to gain additional insights into the factors influencing adherence to anti-tuberculosis treatment two in-depth interviews were conducted with adherent patients’ family members (FM). Additional focus group discussion health care providers from outpatient TB centers

Results

1. According to the participants, being conscientious and responsible was one of the most important factors that determined readiness to adhere to TB treatment.

You know what, if one wants to heal he should be a responsible person, if he is foolish then he won't complete the treatment. Fortunately, I was conscientious and I did what was recommended by the physicians.

2. The participants have acknowledged the seriousness and consequences of disease which pushed them to overcome it.

If left untreated disease will lead to irrevocable consequences. With time, in approximately one and a half years one will be isolated from this world.

3. TB associated stigma was not commonly perceived as a barrier to adherence to treatment. While the theory suggests that experience of stigma hinders support and care for patients

I did not have such difficulties. I did not even think about stigma. Let those who are worried think about it.

Factors emerged from data, factors suggested by the literature and confirmed / not confirmed by study findings

Themes	Predisposing factors	Reinforcing factors	Enabling factors
Emerged from data	1. Sense of responsibility (+) Trust in physician (+)	3. TB associated stigma (-)	-
Confirmed by data	2. Beliefs about TB severity (+) Belief in effectiveness of medication (+)	4. Support from family members, other relatives and friends, and providers (+) Support from medical (+)	Accessibility and affordability of treatment (+)
Not confirmed by data	Knowledge about TB and TB medication (+)	Side effects of medications (-)	5. Regimen complexity (-)

4. Family members’ support was perceived as one of the strongest facilitators of adherence which contributed to patients’ recovery. The idea was supported by the interviewed FM.

I did not lose my hope because there were people next to me... It gave hope.

5. For the majority of participants the treatment regimen did not pose any difficulty.

Nothing disturbed me in particular, I just took capsules and received ten injections.

Conclusion

The study explored and characterized various predisposing and reinforcing facilitators of adherence to anti-tuberculosis treatment. Capturing them in the treatment services provided by the national TB program could assist even more in fighting a public health concern of non-adherence to anti-tuberculosis treatment in Armenia.

Recommendations

Medical personnel should be encouraged to extensively convey to patients the results of good adherence to treatment and consequences of poor adherence. Medical personnel are encouraged to describe complications of disease on the individual level and demonstrate those with visual aids (for instance comparison of X-ray images of successful outcome vs. failure). Of not less importance is active provision of support to TB patients by all stakeholders involved in patients’ TB treatment course.

Acknowledgements

I acknowledge the contribution of National TB Control Center, all physicians and nurses of TB cabinets for readiness to help and for the engagement in the process.

Contact Information

Zaruhi Grigoryan, E-mail: zgrigoryan@aua.am