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Background

Taking your medicine as prescribed or medication adherence is important for controlling chronic conditions, treating temporary conditions, and overall long-term health and well-being (FDA 2016). About 30-50% of chronic disease treatment failures are due to non-adherence to treatment (CDC 2016). Adherence to antiretroviral treatment (ART) is important for the treatment success and is significantly associated with health outcomes. To our knowledge, up to date no studies were conducted in Armenia assessing adherence to ART.

Research Questions

- 1) What is the level of ART adherence among adult (≥ 18) PLHIV in Armenia?
- 2) What are the factors associated with ART adherence among adult (≥ 18) PLHIV in Armenia?

Methods

- ❖ We used quantitative cross-sectional survey design.
- ❖ Structured self-administered questionnaires were used.
- ❖ To calculate the sample size we used the formula for two equal groups to find a difference in proportions.
- ❖ We enrolled 180 beneficiaries of the “PPAN” NGO.
- ❖ Sampling was done using convenience-sampling approach.
- ❖ Care at the HIV clinic, knowledge on HIV/AIDS and ART, ART side effects (ACTG), ART adherence (Morisky), and social support (MOS) were assessed.
- ❖ If the participant answered “no” to all 4 questions (Morisky scale), he was defined as adherent to ART (Morisky, 1986).
- ❖ A correlation between the self-reported adherence level and the treatment efficacy was demonstrated previously (Sodergard, 2016; Gokarn, 2012).

Inclusion and Exclusion Criteria

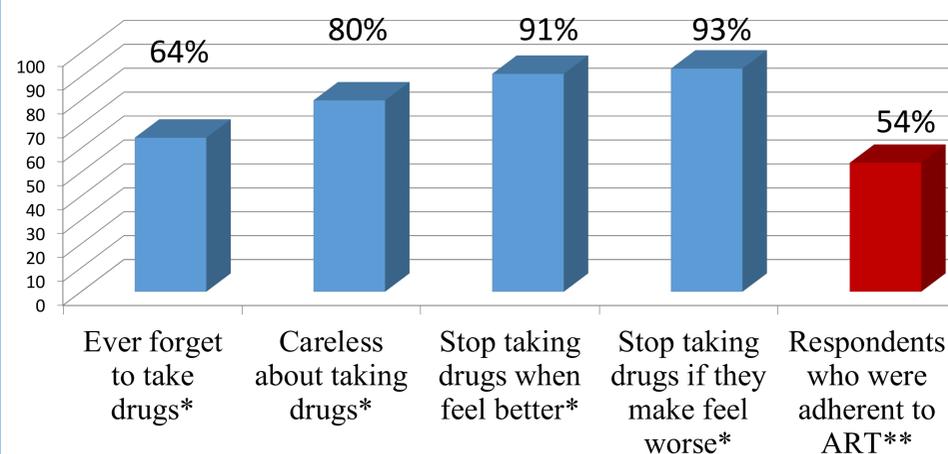
Inclusion criteria: People living with HIV aged 18 years old and above, who were on ART at the time of the study and gave their informed consent to participate were included in the study.

Exclusion criteria: We excluded those, who were not residents of Armenia.

References

- CDC (2016). Center for Disease Control and Prevention, Available at: <https://www.cdc.gov/>. Accessed 07 12 2019.
- FDA (2016). Available at: <https://www.fda.gov/drugs/resourcesforyou/specialfeatures/ucm485545.htm>. Accessed 07 12 2019.
- Gokarn, A., Narkhede, M.G., Pardeshi, G.S.H., Doibale, M.K. “Adherence to Antiretroviral therapy.” JAPI 60 (1012): 16-20.
- Morisky DE, Green LW, Levine DM. Concurrent and predictive validity of a self-reported measure of medication adherence. Medical Care. 24(1) (1986) :67-74.
- Sodergard, B., Halvarsson, M., Brannstrom, J., et al. A comparison between ACTG Adherence Questionnaire and the 9-item Morisky Medication Adherence Scale in HIV-patients. Eighth International Congress on Drug Therapy in HIV Infection, Glasgow, UK; 2006

Results



*The percentages of participants, who answered “no” to the question.

** Participants were adherent to ART, if they answered “no” to all four questions.

Descriptive statistics

The mean age of participants was 40.6 (SD 8.3). Males comprised 61.1% of the sample. About 67.8% of participants were married and 73.3% had secondary school education. Residents of Yerevan (capital city) comprised 37.8% of the sample. Only 44.1% of participants were employed. Approximately 53.1% of participants reported having an average socio-economic status

Variables significantly associated with the outcome in the unadjusted analysis, were included in the multivariate model.

Adjusted analysis

	OR	95% CI	P-value
Gender			
Male	1		
Female	1.84	0.94-3.60	0.08
Place of residence			
Village	1		
City	1.88	1.00-3.54	0.05
Marital status			
Not married	1		
Married	2.05	1.04-4.04	0.04
Presence of co-infections			
No	1.0		
Yes	0.66	0.32-1.39	0.29
Knowledge on HIV/AIDS & ART	1.43	1.00-2.05	0.05

Conclusion

The study results suggest the need for educational programs on HIV/AIDS and ART among PLHIV. Programs improving compliance and adherence to treatment should be implemented especially among males and residents of rural places. Further studies will explore facilitators and barriers of ART adherence in depth.