Social factors affecting ART adherence in rural settings in Zambia

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It is still hard to access Antiretroviral Treatment (ART) service for People Living with HIV (PLHIV) who live in rural Zambia despite the Government’s effort to expand ART service nationwide at district level. There are strong demands for scaling up ART service at rural health centre level with challenges of shortage in health resources.

Mumbwa is a rural district with the area of 23000 km² and the population of 167,000, where ART services were provided only at Mumbwa District Hospital. Mumbwa district health management team introduced mobile ART services through the human resource and technical support by district hospitals, and community involvement at four rural health centers in the first quarter of 2007. The Mobile ART services obviously improved the accessibility to ART services, especially for the ART clients in better functional status. In addition, the Mobile ART services are likely to reduce “lost to follow-up” cases. It might be because of the reasons that the community was involved and the services were more supportive to ART clients in the rural areas. Therefore, we concluded that Mobile ART services involving the community are beneficial and effective, and help ART services expansion to rural health facilities where resources are limited, and as close as possible to places where clients live.

Given the living conditions in rural areas, the situation for PLHIV in rural Zambia differs substantially from that in urban areas or in developed countries. Those differences should be taken into consideration to devise successful ART expansion programs. The purpose of this study was to assess the factors that influence ART adherence arising in rural settings in Zambia. A survey was conducted with face-to-face interviews using a semi-structured questionnaire and written informed consent was obtained at ART sites in Mumbwa District. The questionnaire included items such as the socio-demographic characteristics of respondents, support for adherence, ways to remember when to take ARVs at scheduled times, and the current status of adherence. Valid responses were obtained from 518 research participants. The mean age of the respondents was 38.3 years and the average treatment period was 12.5 months. More than half of the respondents (51%) were farmers, about half (49%) did not own a watch, and 10% of them used the position of the sun to remember when to take ARVs. Sixteen percent of respondents experienced fear of stigma resulting from taking ARVs at work or home, and 10% felt pressured to share ARVs with someone. Eighty eight percent of the participants reported that they had never missed ARVs in the past four days. Multivariable logistic regression analysis identified age (38 years old or less, OR = 2.5, 95% CI: 1.3–4.8, p = 0.005), ‘remembering when to take ARVs based on the position of the sun’ (OR = 3.3, 95% CI: 1.3–8.8, p = 0.016) and ‘feeling pressured to share ARVs with someone’ (OR = 4.4, 95% CI: 1.6–12.0, p = 0.004) as independent factors for low adherence. As ART services expand to rural areas, program implementers should pay more attention to more specific factors arising in rural settings since they may differ from those in urban settings.