QUALITY OF LIFE OUTCOMES OF AN ASSERTIVE OUTREACH PROGRAM
IN RURAL CENTRAL ALBERTA

Neels Ehlers, MA & Carla Prediger, RPN
Addiction and Mental Health Services,
Central Zone, Alberta, Canada.
June 25, 2015.
RURAL CENTRAL ALBERTA

- **Area:** 95,000 Km²
- **Population:** 453,469
- **Number of people per Km²:** 4.8
- **Major Urban Center:** Red Deer (98,585 residents)
- **Rural Towns:** 47 (10,000 or less residents)
INTRODUCTION

- Until the turn of the 19th century the main focus of treatment of illnesses was on saving lives.

- The development of medicine as a science brought along a conceptual shift from simply treating symptoms of illness and prolonging life to improving the quality of life (QOL) of patients.

- Chronic illnesses replaced life threatening conditions as major challenges to clinicians and brought with them issues such as: cost of treatment, disability, social impairment and burden of care.

- These issues directly or indirectly influence the patients' sense of well being, self esteem and QOL. (Trivedi, 1999).
An important aspect of QOL is that it is different from an individual’s health status and is a much broader term that includes health status as well as other features such as environment, income and living standard.

The World Health Organization (WHO) explained that the division between health status & QOL is that QOL is defined by patients’ subjective disadvantage of being ill, in contrast to health status, which is defined by clinical disability caused by disease (WHO, 1991).
The Assertive Outreach Program (AOP) in Central Alberta provides persons with severe or persistent mental illness (Axis 1) with a community based service.

Core to the AOP is the relationship between the client and clinicians, emphasizing a consumer-directed partnership which is maintained over time to ensure continuity of care.

AOP provides a continuum of flexible, comprehensive interventions that assist individuals to maintain a reasonable quality of life (QOL) in their own communities.
The belief that recovery is viable provides the essential and motivating sense of a better future.

An important AOP strategy is constructive engagement, aimed at recovery that focusses on the restoration of a meaningful life, of gaining a new sense of purpose in life.

The assessment of clients’ QOL is an area of increasing importance and is considered an essential outcome for client management and the mental health services. It provides an invaluable supplementary appraisal by yielding a measure of the relationship between the health care services and clients' quality of life.
ASSERTIVE OUTREACH PROGRAM FRAMEWORK

Addiction & Mental Health, AHS, Central Zone, 2009

AOP STAFF
Registered Psychiatric Nurses
5 – 1.0 FTE
1 – 0.8 FTE
1 – 0.7 FTE
Registered Nurses
1 – 1.0 FTE
1 – 0.8 FTE
Mental Health Aides
4 – 1.0 FTE
2 – 0.9 FTE
1 - .08 FTE
METHODOLOGY

- **Design**
  Two descriptive cross-sectional studies conducted during October 2013 and October 2014 in Rural Central Alberta.

- **Objective**
  To assess the QOL of AOP clients as a supplementary appraisal for client management and mental health services outcomes.

- **World Health Organization Quality of Life-BREF (WHOQOL-BREF)**
  The WHOQOL-BREF assesses individuals’ overall quality of life and generates a profile of four domains:
  - Environment
  - Psychological
  - Physical
  - Social Relationships.
## WHOQOL-BREF DOMAINS

<table>
<thead>
<tr>
<th>Domain</th>
<th>Facets incorporated within domains</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environment</td>
<td>Transport, Financial resources, Home environment, Freedom, physical safety and security, Health and social care: accessibility and quality, Opportunities for acquiring new information and skills, Physical environment (pollution / noise / traffic / climate), Participation in and opportunities for recreation / leisure activities</td>
</tr>
<tr>
<td>Psychological</td>
<td>Self-esteem, Positive feelings, Negative feelings, Bodily image and appearance, Spirituality / Religion / Personal beliefs, Thinking, learning, memory and concentration</td>
</tr>
<tr>
<td>Physical</td>
<td>Mobility, Sleep and rest, Work Capacity, Energy and fatigue, Pain and discomfort, Activities of daily living, Dependence on medicinal substances and medical aids</td>
</tr>
<tr>
<td>Social Relationships</td>
<td>Social support, Sexual activity, Personal relationships</td>
</tr>
</tbody>
</table>
METHODOLOGY

- Ethics

  ARECCI Ethics Guidelines (www.aihealthsolutions.ca/arecci/guidelines)
  - Project Type: A health service evaluation.
  - ARECCI score = 3: “The project involves minimal risk.”

- Data collection and analysis

  Data were collected by administering the WHOQOL-BREF.
  Data were captured and analyzed using SPSS 16.0 software.
  Descriptive statistics regarding the socio-demographic characteristics of participants as well as their perceived QOL in terms of the environment, psychological, physical and social relationships domains were produced.

- Sample

  A total population of AOP clients (N=205, N=195) served as the samples for the October 2013 and October 2014 studies respectively.
RESULTS

- **Response rate**
  
  Response rate was 71% and 77% for the 2013 and 2014 surveys respectively.

- **Respondent demographics**

  - **Prevalent Diagnosis (AXIS I):** Schizophrenia (Paranoid) complicated by a combination of bi-polar and psychotic disorders and personality cluster traits.

<table>
<thead>
<tr>
<th>Year</th>
<th>Females</th>
<th>Males</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>48%</td>
<td>52%</td>
</tr>
<tr>
<td>2014</td>
<td>46%</td>
<td>54%</td>
</tr>
</tbody>
</table>

  - **Gender:**
### RESULTS

- **Respondent demographics**

<table>
<thead>
<tr>
<th></th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>n =146</strong></td>
<td><strong>n=151</strong></td>
<td></td>
</tr>
</tbody>
</table>

- **Age:**
  - Average: 50 (SD 13.8) 49 (SD 14.7)
  - Range: 19-84 years 22-85 years

- **Marital Status:**
  - Single: 56% 59%
  - Separated/Divorced/Widowed: 27% 26%
  - Married/Living Together: 17% 15%

- **Neighbourhood:**
  - City (> 10,000 residents): 27% 34%
  - Town (between 1,000 – 10,000): 64% 60%
  - Village/Hamlet (< 1,000): 9% 6%
RESULTS

Overall Rating of Quality of Life (QOL) and Satisfaction with Health

**Scale

- **QOL**: 1=Very Poor - 5=Very Good
- **Health**: 1=Very Dissatisfied - 5=Very Satisfied

---

![Bar chart showing overall ratings for QOL and Health in 2013 and 2014.](chart.png)

- **2013**
  - QOL: $\bar{x} = 3.3$ (SD = 1.2)
  - Health: $\bar{x} = 3.7$ (SD = 1.0)

- **2014**
  - QOL: $\bar{x} = 3.3$ (SD = 1.1)
  - Health: $\bar{x} = 3.6$ (SD = 1.1)

---

**5 point Likert type scale.**
## RESULTS

**Satisfaction with Quality of Life in terms of WHOQOL-BREF Domains**

<table>
<thead>
<tr>
<th>Domain</th>
<th>'13</th>
<th>'14</th>
<th>'13</th>
<th>'14</th>
<th>'13</th>
<th>'14</th>
<th>'13</th>
<th>'14</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environment</td>
<td>67</td>
<td>64</td>
<td>58</td>
<td>58</td>
<td>56</td>
<td>53</td>
<td>54</td>
<td>53</td>
</tr>
<tr>
<td>Psychological</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Relationships</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**WHOQOL-BREF Scale (0-100)**
RESULTS

Satisfaction with QOL in terms of WHOQOL-BREF Domains By Gender By Year

WHOQOL-BREF Scale

<table>
<thead>
<tr>
<th>Year</th>
<th>Environment</th>
<th>Psychological</th>
<th>Physical</th>
<th>Social relationships</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>64</td>
<td>54</td>
<td>52</td>
<td>53</td>
</tr>
<tr>
<td>2014</td>
<td>70</td>
<td>65</td>
<td>50</td>
<td>54</td>
</tr>
</tbody>
</table>

Female | Male

Environment
Psychological
Physical
Social relationships
RESULTS

Satisfaction with QOL in terms of WHOQOL-BREF Domains By Age Group By Year

WHOQOL-BREF Scale

<table>
<thead>
<tr>
<th>Year</th>
<th>Environment</th>
<th>Psychological</th>
<th>Physical</th>
<th>Social relationships</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>66</td>
<td>57</td>
<td>56</td>
<td>50</td>
</tr>
<tr>
<td>2014</td>
<td>68</td>
<td>58</td>
<td>56</td>
<td>55</td>
</tr>
<tr>
<td>2013</td>
<td>64</td>
<td>59</td>
<td>57</td>
<td>50</td>
</tr>
<tr>
<td>2014</td>
<td>65</td>
<td>57</td>
<td>56</td>
<td>56</td>
</tr>
</tbody>
</table>

< 50 Years | > = 50 Years

Legend:
- Purple: < 50 Years
- Green: > = 50 Years
## RESULTS

**Satisfaction with Quality of Life in terms of WHOQOL-BREF Domains By Marital Status By Year**

<table>
<thead>
<tr>
<th>WHOQOL-BREF Domains</th>
<th>Marital Status</th>
<th>Score 2013</th>
<th>Score 2014</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Environment</strong></td>
<td>Single</td>
<td>70</td>
<td>66</td>
</tr>
<tr>
<td></td>
<td>Married/Living Together</td>
<td>68</td>
<td>68</td>
</tr>
<tr>
<td></td>
<td>Separated/Divorced/Widowed</td>
<td>59</td>
<td>57</td>
</tr>
<tr>
<td><strong>Psychological</strong></td>
<td>Single</td>
<td>59</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td>Married/Living Together</td>
<td>58</td>
<td>59</td>
</tr>
<tr>
<td></td>
<td>Separated/Divorced/Widowed</td>
<td>53</td>
<td>52</td>
</tr>
<tr>
<td><strong>Physical</strong></td>
<td>Single</td>
<td>58</td>
<td>55</td>
</tr>
<tr>
<td></td>
<td>Married/Living Together</td>
<td>57</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>Separated/Divorced/Widowed</td>
<td>50</td>
<td>48</td>
</tr>
<tr>
<td><strong>Social relationships</strong></td>
<td>Single</td>
<td>56</td>
<td>51</td>
</tr>
<tr>
<td></td>
<td>Married/Living Together</td>
<td>59</td>
<td>63</td>
</tr>
<tr>
<td></td>
<td>Separated/Divorced/Widowed</td>
<td>48</td>
<td>49</td>
</tr>
</tbody>
</table>
## RESULTS

### Satisfaction with Quality of Life in terms of WHOQOL-BREF Domains By Community By Year

<table>
<thead>
<tr>
<th>WHOQOL-BREF Domains</th>
<th>Community</th>
<th>Score 2013</th>
<th>Score 2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environment</td>
<td>City (&gt; 10,000 residents)</td>
<td>70</td>
<td>70</td>
</tr>
<tr>
<td></td>
<td>Town (between 1,000 – 10,000)</td>
<td>65</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td>Village/Hamlet (&lt; 1,000)</td>
<td>70</td>
<td>73</td>
</tr>
<tr>
<td>Psychological</td>
<td>City</td>
<td>63</td>
<td>65</td>
</tr>
<tr>
<td></td>
<td>Town</td>
<td>55</td>
<td>53</td>
</tr>
<tr>
<td></td>
<td>Village/Hamlet</td>
<td>63</td>
<td>66</td>
</tr>
<tr>
<td>Physical</td>
<td>City</td>
<td>62</td>
<td>61</td>
</tr>
<tr>
<td></td>
<td>Town</td>
<td>54</td>
<td>49</td>
</tr>
<tr>
<td></td>
<td>Village/Hamlet</td>
<td>52</td>
<td>55</td>
</tr>
<tr>
<td>Social relationships</td>
<td>City</td>
<td>60</td>
<td>62</td>
</tr>
<tr>
<td></td>
<td>Town</td>
<td>50</td>
<td>47</td>
</tr>
<tr>
<td></td>
<td>Village/Hamlet</td>
<td>61</td>
<td>65</td>
</tr>
</tbody>
</table>
DISCUSSION

➢ The studies account for a set of QOL factors that represent specific areas of relative vulnerability and strength of the participants.

➢ Results should be interpreted with caution because sample sizes are relatively small and the results apply only to those who participated.

➢ In general the participants considered their overall health lower than their quality of life.

➢ The lowest scores among the WHOQOL-BREF domains relate to the physical and social relationships domains followed by higher scores in the psychological and environment domains.

    Mean scores for all the domains are beyond the midpoint on the BREF Scale: 0 – 100.
During both surveys females rated lower in the *psychological* and *physical* domains than males.

Younger participants (< 50 years) in both surveys rated slightly lower than older participants in the *environment* and *social relationships* domains. Psychological and physical domain scores for younger participants were slightly higher in 2014 than in 2013.

In both surveys, participants who were either separated, divorced or widowed scored lowest in each of QOL domains. Marital status correlates highest with the environment domain.

Participants living in towns (1,000 - 10,000 residents) were least happy with their QOL than those living in cities and small villages.
CONCLUSION AND RECOMMENDATIONS

- Overall, AOP clients are fairly satisfied with both their QOL and their health.

- The WHOQOL-BREF results provide essential information that is needed for monitoring program and client management outcomes.

- In terms of relative vulnerability, those in greater need of care and support seems to be:
  - Women,
  - People younger than 50 years,
  - Individuals who are either separated, divorced or widowed.
  - Clients staying in towns with between 1,000 and 10,000 residents.

- Regular (annual) implementation of the WHOQOL-BREF will enhance proactive program strategies to assist individuals with severe and or persistent mental illness to maintain a reasonable quality of life in their own communities.
ACKNOWLEDGEMENT

A sincere appreciation to:

The participating AOP clients who so willingly share their experience.

The dedicated AOP staff members in Central Alberta.

Health Statistics and Information Systems, WHO.