Follow Up Evaluations for Phase 1 & Phase 2

Summary

In 2016, StrongMinds undertook a follow up evaluation of our first patients treated in 2014 and 2015. Overall, the results are encouraging. For example, 24 and 18 months post-treatment, more than two thirds of the women retained their depression-free status. The majority of women reported that they still met with the groups formed through the StrongMinds therapy. They also reported improved focus, employment, job performance and attendance, as well as social connections at follow up. However, the average woman also reported decreased income and savings, and a reversion to baseline levels of nutrition intake for women and household members. This is probably a result of recent financial challenges in Uganda. During 2015 and 2016, the Uganda shilling depreciated 50% against the dollar.[1] In addition, food costs continued to rise over this period with an annual inflation rate of over 16%.[2]

Introduction

In 2016, StrongMinds engaged an external team of data collectors to follow up with the very first patients treated by the organization, in 2014 and early 2015. These patients, known as the Phase 1 (treated May through September 2014) and Phase 2 (treated through November 2014 through February 2015) cohorts, were the subjects of the two post-treatment impact evaluations available here. Our goal in revisiting these patients is to understand how they are faring 24 and 18 months after StrongMinds' therapy ended, both in terms of their mental health/depression status, and their overall well-being and the well-being of their families.

All women treated in Phase 1 and Phase 2 participated in group talk therapy based on interpersonal psychotherapy (IPT) and led by StrongMinds staff. Phase 1 patients were treated for 16 weeks; Phase 2 patients were treated for 12 weeks. Each woman was screened for depression using the PHQ-9[3], and that tool was re-administered to assess her progress -- most recently in Summer 2016, approximately 24 months and 18 months after therapy concluded. In addition, StrongMinds administered a functionality survey to patients from Phase 2, to better understand how decreased depression impacts her economic and work status, income and savings, health, and the well-being of her children. Like the PHQ-9, this survey, was re-administered to patients to provide insight into their well-being at follow-up.

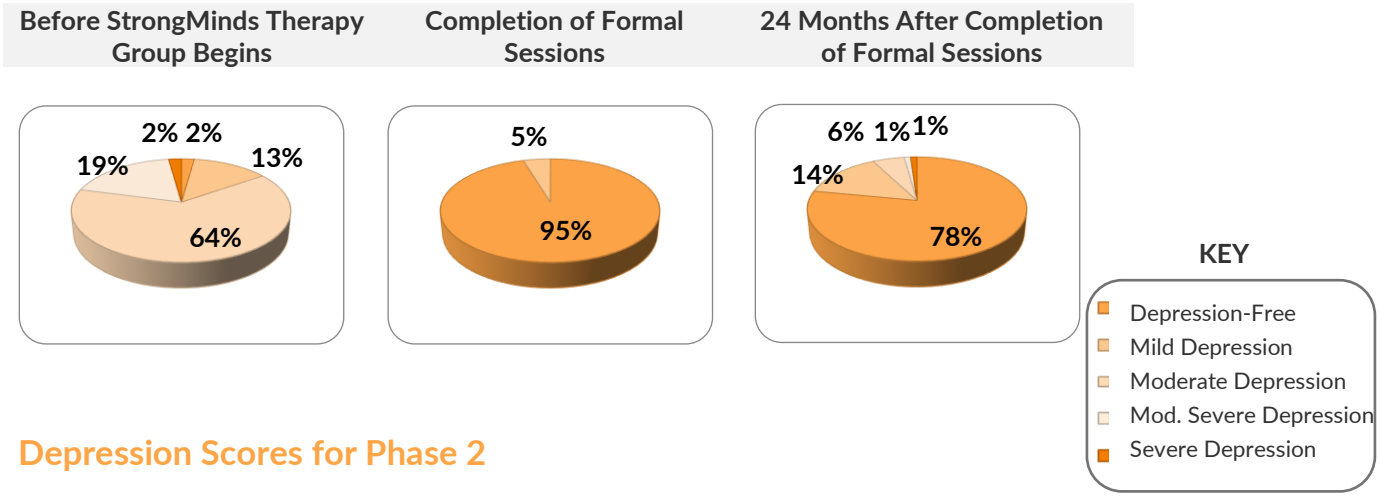
In 2014, informal control populations were established for both Phase 1 and Phase 2 patients, consisting of women who screened for depression but did not participate. These control women served as an initial comparator group to understand immediate impact of the therapy. Unfortunately, the control groups were so small that they proved impossible to locate in meaningful numbers after years had passed and so no resulting comparator data is available.

Key Learnings

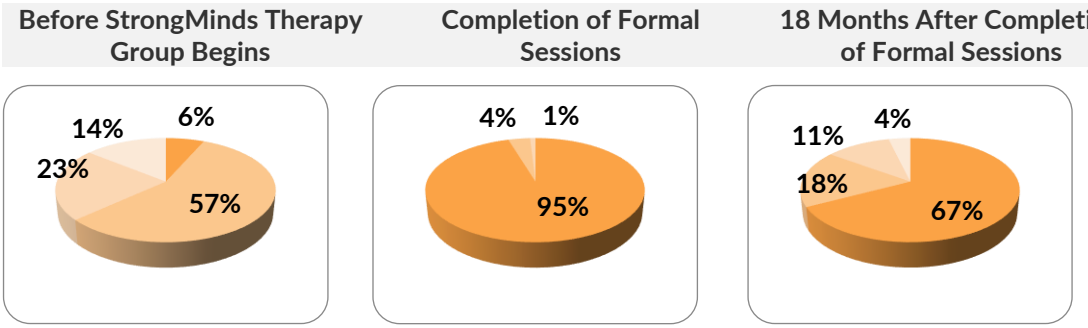
What did we learn about Phase 1 and Phase 2 patients' depression status 24 and 18 months following treatment?

- Of the 244 Phase 1 patients, **78% are depression-free 24 months after therapy.**
- Of the 270 Phase 2 patients, **67% are depression-free 18 months after therapy.**
- Two years later, **57% of the first StrongMinds Therapy Group members (Phase 1) continue to meet informally** without StrongMinds assistance.
- A year and a half later, **78% of Phase 2 group members continue to meet informally** without StrongMinds assistance.

Depression Scores for Phase 1



Depression Scores for Phase 2



While both the Phase 1 and 2 patients had 95% depression-free rates at the completion of formal sessions, our Impact Evaluation reports and subsequent experience has helped us to understand that those rates were somewhat inflated by social desirability bias, roughly by a factor of approximately ten percentage points. This was due to the fact that their Mental Health Facilitator administered the PHQ-9 at the conclusion of therapy. StrongMinds now uses external data collectors to conduct the post-treatment evaluations. Thus, for effective purposes, StrongMinds believes the actual depression-free rates for Phase 1 and 2 to be more in the range of 85%.

The 78% and 67% depression-free rates found at 24 and 18 months later, respectively, do of course represent reductions from the post treatment rates of 85%. However, both the 85% post treatment rate and follow-on rates of 78% and 67% are still significantly higher depression-free rates than are typically found in depression treatment studies or trials outside of Africa--suggesting the ongoing and long-term impact of the StrongMinds' program.

Our analysis also suggests that women who continue to be depression-free are not necessarily more likely to still be participating in their groups. Our working theory is that women might be reporting that they no longer meet with their full groups, but they might instead have a supportive confidant or friend whom they see regularly. We will expand this question to understand how women might still be using one another for continued support and investigate this further in 2017.

Phase 1 Functionality Data

StrongMinds did not collect functionality and well-being data for Phase 1 patients 24 months after therapy concluded. The tool that we used to collect this data in 2014 for Phase 1 patients was our very first iteration of the instrument and proved to have several collection issues. For example, many questions were poorly worded and resulted in confused responses by the respondents. We revised the tool for use with the Phase 2 patients when we collected their information later in 2014. Since we had a low degree of confidence in the original functionality/well-being collection tool from 2014 for Phase 1 patients, we chose not to re-use this tool or to collect the data at this 24-month study, and focused instead on the Phase 2 patients.

Case Study of Phase 2 Functionality Data

In addition to measuring former patients' depression scores and involvement in their therapy groups, StrongMinds also surveyed former patients on their functionality and well-being. Results from the follow up of Phase 2 patients, 18 months after their therapy concluded, are summarized below.

1. Benefits evident in our first impact reports immediately after treatment have further increased 18 months later:

    - **Employment and Productivity**
      Patient reported self-employment in the last 18 months went from 17% to 45%. In addition, employment continuity increased -- yearlong work nearly doubled from 35% to 66%. Forty percent of women are working full time, up from 35%. Women also reported a significant decrease in absenteeism by comparison with data immediately following treatment.

    - **Job Concentration and Job Performance**
      Only 19% report poor attention, down from 44% 18 months ago. In addition, 28% report good or excellent attention versus only 1% at the end of formal sessions. Less than 1% reported having no concentration at work, down significantly from 13% at the conclusion of therapy. Similarly, there were statistically significant gains in self-reported job performance; no women reported that they were unable to perform at work at the 18 month follow up.

- **Support Systems and Safety Net**
  There were increases in the number of women who report someone in their lives to rely on for support or enjoyment, above and beyond the gains seen immediately after therapy. Eighty-eight percent of women now report having someone in their lives that would help with daily chores if they fell sick and 96% report having someone in their life with whom to do something enjoyable.

2. Additional benefits have endured, unchanged, in the 18 months since therapy concluded:

- **Physical Health**
  There were no statistically significant changes after 18 months in improvements seen in physical health and well-being, as measured by sustained decreases in the proportion of women who report seeking care for an illness or for a chronic condition.

- **Need to Borrow Money**
  There were also no changes in the number of women reporting a need to borrow money.

3. Some post-therapy gains appear to have eroded:

- **Reported Income and Savings Levels**
  Women's self-reported income and savings levels, on average, have decreased from their relative highpoint immediately following treatment. This is perplexing in light of the significant improvements reported in employment, productivity, and job performance above. We suspect that macroeconomic factors, including a troubled national economy and rising inflation, may be playing a role as noted in the introduction. Without an effective comparator group, we cannot understand whether patients are still better off financially than women who were not treated.

- **Nutrition, Schooling, and Shelter**
  As above, self-reported nutrition, children's schooling, and shelter indicators have declined, effectively to their pre-treatment levels. Again, we suspect these might be a result of larger macroeconomic factors, but need to investigate further. Our research analysis also suspects data collection error might be present here – as one example, the number of self-reported daily meals declined from 3.67 at treatment endline to 2.43 after 18 months. But subsequent questions seeking explanations for missed meals were answered as not applicable; women did not indicate concern about their households' food intake.

Learnings for the Future

This most recent evaluation has prompted several learnings, to shape future programming and evaluations. These include:

- The need for a comparator, or control, population to provide evidence of correlation between the treatment and longer-term changes in women's well-being. In 2017, we will develop a plan to introduce well-designed, ethical control populations.
- The importance of designing self-reported questions on our survey tools based on best practices to ensure accuracy. This is particularly true for questions about income. We currently ask our patients to estimate their weekly earnings from their primary occupation. But many women we serve are informally employed, are paid – or pay themselves – in in-kind goods, or face other challenges that make it difficult to calculate an income. Research suggests that asking women to estimate how much they spend in a given week might be a better proxy for income level. We will continue to improve these tools accordingly.
- Programmatically, we are improving our approach based on these findings. For example, StrongMinds now actively encourages groups to continue to meet once therapy concludes – by supporting group members to elect group leaders and to designate formal meeting times and locations. We are also concerned that a woman's capacity to save money and meet her family's basic needs may not withstand external shocks or economic downturns. As a result, we are now actively connecting women who graduate from our therapy groups to other organizations who are providing these women with livelihood skills.

Looking forward, StrongMinds will continue to strengthen our evaluation efforts and will continue to follow up with patients at 6 or 12 month intervals. We also remain committed to implementing a much more rigorous study, in the form of an externally-led, longitudinal randomized control trial, in the coming years.

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[1] "Uganda." The World Factbook. Central Intelligence Agency, 2017. Retrieved July 14, 2017.

[2] "Uganda: Consumer Price Index December 2015." Highlights of Consumer Price Index for December 2015. ReliefWeb, 2017. Retrieved July 14, 2017.

[3] StrongMinds diagnoses our patients using a tool called the Patient Health Questionnaire (PHQ-9), which is contained within the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) published by the American Psychiatric Association and supported by the WHO for use in the developing world.