SURVEY RESULTS IMPLY ADULTS WITH SCHIZOPHRENIA, CAREGIVERS FRUSTRATED BY TRADEOFFS IN MANAGING SYMPTOMS AND MEDICATION SIDE EFFECTS

Psychiatrists also report frustration in finding appropriate treatments for their patients

- New consumer survey results\(^1\) show that nearly three in four adults from a sample of those with schizophrenia\(^2\) and caregivers\(^3\) of individuals with schizophrenia prioritize symptom management over minimizing medication side effects\(^4\), yet more than half report feeling frustration with side effects\(^5\) — implying that they may be making tradeoffs to manage the condition\(^6\).
- Psychiatrists surveyed also may be searching for appropriate treatments, as only 32 percent were satisfied or very satisfied with currently available schizophrenia medications.
- Results imply that surveyed adults with schizophrenia, caregivers and psychiatrists may be searching for treatment options that offer greater balance of efficacy with safety and increased tolerability, in order to address both symptoms and side effects\(^6\).

Princeton, New Jersey and Deerfield, Ill. – June 22, 2015 – Results from a recent survey of adults with schizophrenia, caregivers of adults with schizophrenia and psychiatrists imply that surveyed groups may feel frustrated by the tradeoffs being made with current schizophrenia treatment options and may be seeking greater balance in medications – ones that can address the symptoms of schizophrenia, while also reducing side effects\(^6\).

The Living with Schizophrenia survey\(^7\) was conducted by Harris Poll on behalf of Otsuka America Pharmaceutical, Inc. and Lundbeck between March 26 and April 8, 2015, among 120 U.S. adults ages 18+ who have been diagnosed with schizophrenia\(^1\); 300 U.S. adults ages 18+ who provide unpaid care to an adult with schizophrenia (“caregivers”)\(^1\) and 151 U.S. psychiatrists\(^8\) who treat adults 18+ with schizophrenia. Subjects were invited by email to participate and adults with schizophrenia were not required to currently be on medication for their schizophrenia symptoms.

“Schizophrenia is a serious, progressive disease that has a significant impact on patients and caregivers. When it comes to treating it, both groups have been making concessions in an effort to help themselves or a loved one,” said Dr. Rebecca Roma, Medical Director of Community Treatment Teams, Mercy Behavioral Health. “Similarly, psychiatrists are committed to their patients with schizophrenia and creating the most optimal treatment regimen to help set up patients for success. In order to do so, medication options that achieve a balance of efficacy with safety and greater tolerability are needed.”

When given the choice between managing symptoms or minimizing side effects, nearly three-quarters of surveyed adults with schizophrenia who have ever taken schizophrenia medication (70 percent) and surveyed caregivers whose loved one has ever taken schizophrenia medication (74 percent) report that it is more important to ‘manage symptoms.’ However, more than half of these adults with schizophrenia (51 percent) and caregivers (56 percent) report feeling frustrated with schizophrenia medication because the side effects are hard to deal with\(^5\). Survey results imply, however, that the tradeoff these adults with schizophrenia and caregivers may be making does not result in complete symptom management: nearly three in four (73 percent) surveyed adults with schizophrenia who currently take medication\(^9\) report still dealing with schizophrenia symptoms at least monthly, and almost nine in ten (87 percent) surveyed caregivers whose loved one currently takes medication report the same.
As they work to help patients manage the symptoms of the disease, psychiatrists surveyed report feeling frustrated by medication side effects (90 percent), compliance (80 percent) and efficacy (66 percent). According to the psychiatrists surveyed, the biggest barrier to successful treatment of schizophrenia is patient compliance (45 percent), and these psychiatrists believe the top three reasons patients may not take their medication exactly as prescribed are because they believe they no longer need it (87 percent), they forget (74 percent) and they can’t tolerate the side effects (75 percent), while only 21 percent of patients noted tolerability as a reason for lack of adherence.

More than 2 million Americans are currently living with schizophrenia, and the impact of the disease can be profound. At least half of adults with schizophrenia (58 percent), caregivers (50 percent) and psychiatrists (58 percent) surveyed report feeling frustrated by the social shame and stigma surrounding schizophrenia. Approximately the same percentage of adults with schizophrenia (54 percent) and caregivers (51 percent) also report feeling frustrated by the disease’s impact on their life and daily activities. In addition, caregivers report that, on average, their loved one with schizophrenia missed work or school more than twice and weren’t able to complete daily living tasks like cooking, cleaning or paying bills nearly 10 times in the month previous to the survey.

Survey results suggest that all groups are looking for schizophrenia treatment options that offer patients greater balance in efficacy and tolerability.

**About the Survey Results**

Additional findings of the *Living with Schizophrenia* survey that underscore the frustration these groups feel, include:

- 63 percent of adults with schizophrenia who have ever taken schizophrenia medication and 76 percent of caregivers whose loved one has taken medication agree that there have been a lot of ups and down with their schizophrenia medication. Adults with schizophrenia in this survey report being prescribed an average of five medications since their diagnosis (an average of 18 years ago), and 44 percent have switched medication at least once in the last 12 months.

- About half (51 percent) of adults with schizophrenia surveyed who have ever taken medication feel frustrated that their medication doesn’t/didn’t work as well they want it to. Nearly two in three caregivers whose loved one has ever taken medication agree that there are not enough medication options that work well to relieve their loved one’s symptoms (63 percent) and they feel frustrated that schizophrenia medication doesn’t work as well as their loved one wants it to (65 percent).

- Similarly, 85 percent of psychiatrists surveyed agree that they often feel frustrated that schizophrenia medication does not work as well for their patients as they want it to. Only 32 percent of surveyed psychiatrists are satisfied or very satisfied with currently available schizophrenia medications, and these psychiatrists believe only 26 percent of their patients are satisfied or very satisfied.

- Only 20 percent of psychiatrists surveyed agree that most of their schizophrenia patients always take their medication exactly as prescribed, and 90 percent worry that their patients will not take their medication exactly as prescribed. These psychiatrists cite side effects as the number one thing that frustrates their patients about their schizophrenia medication.
For more results and shareable resources, please visit LivingWithSchizophreniaSurvey.com.

**About the Living with Schizophrenia Survey**

The *Living with Schizophrenia* survey was conducted online by Harris Poll on behalf of Otsuka America Pharmaceutical, Inc. and Lundbeck between March 26 and April 8, 2015. A total of 120 surveys were collected among adults ages 18+ diagnosed with schizophrenia in addition to 300 unpaid caregivers to adults with schizophrenia and 151 licensed psychiatrists who treat at least two schizophrenia patients per month within the United States. Data for adults diagnosed with schizophrenia and caregivers were not weighted and are only representative of those who completed the survey. For complete survey methodology, including weighting variables and subgroup sample sizes, please contact Kimberly Whitefield at Otsuka (kimberly.whitefield@otsuka-us.com) or Nick Przbyciel (nprz@lundbeck.com) at Lundbeck.

**About Otsuka America Pharmaceutical, Inc.**

Otsuka America Pharmaceutical, Inc. (OAPI) is an innovative, fast-growing healthcare company that commercializes Otsuka-discovered and in-licensed products in the U.S., with a strong focus on neuroscience, oncology, cardio-renal, and medical devices. For more information, visit www.otsuka-us.com.

OAPI is a subsidiary of Otsuka America, Inc. (OAI), a holding company established in the U.S. in 1989. OAI is wholly owned by Otsuka Pharmaceutical Co., Ltd., a global healthcare company with the corporate philosophy: 'Otsuka-people creating new products for better health worldwide.'

Otsuka Pharmaceutical is a leading firm in the challenging area of mental health and also has products and research programs for several under-addressed diseases including tuberculosis, a significant global public health issue. These commitments illustrate more powerfully than words how Otsuka is a “big venture” company at heart, applying a youthful spirit of creativity in everything it does.


**About Lundbeck**

Lundbeck is a global pharmaceutical company specialized in brain diseases. For more than 70 years, we have been at the forefront of research within neuroscience. Our key areas of focus are alcohol dependence, Alzheimer’s disease, bipolar disorder, depression/anxiety, epilepsy, Huntington’s disease, Parkinson’s disease, schizophrenia and symptomatic neurogenic orthostatic hypotension (NOH).

An estimated 700 million people worldwide are living with brain disease and far too many suffer due to inadequate treatment, discrimination, a reduced number of working days, early retirement and other unnecessary consequences. Every day, we strive for improved treatment and a better life for people living with brain disease – we call this Progress in Mind. Read more at www.lundbeck.com/global/about-us/progress-in-mind.

In 2015, Lundbeck can celebrate its 100th anniversary. During the past century, millions of people have been treated with our therapies. It is complex and challenging to develop improved treatments for brain disease, but we keep our focus: There is still so much we need to achieve in the next 100
years to ensure a better life for people living with brain disease.

Lundbeck has approximately 6,000 employees in 57 countries who are engaged in the entire value chain throughout research, development, production, marketing and sales. Our pipeline consists of several late-stage development programmes and our products are available in more 100 countries. We have research centres in China, Denmark and the United States and production facilities in China, Denmark, France and Italy. Lundbeck generated core revenue of DKK 13.5 billion in 2014 (EUR 1.8 billion; USD 2.4 billion).

Lundbeck in the U.S.
In the U.S., Lundbeck employs more than 800 people focused solely on accelerating therapies for brain diseases. With a special commitment to the lives of patients, families and caregivers, Lundbeck US actively engages in hundreds of initiatives each year that support our patient communities. To learn more, visit us at http://www.lundbeck.com/us and connect with us on Twitter at @LundbeckUS.

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Footnotes

1. The Living with Schizophrenia survey was conducted online by Harris Poll on behalf of Otsuka America Pharmaceutical, Inc. and Lundbeck between March 26 and April 8, 2015, among 120 U.S. adults ages 18+ who self-report that they have been diagnosed with schizophrenia by a healthcare professional ("adults with schizophrenia"); 151 U.S. psychiatrists who treat adults ages 18+ with schizophrenia; and 300 U.S. adults ages 18+ who provide unpaid care to an adult who has been diagnosed with schizophrenia ("caregivers"). The survey did not attempt to interview the direct caregivers of the adults with schizophrenia surveyed and, based on the anonymous nature of the survey, would not directly know that information. Any incidence of patient/caregiver-related respondents is purely coincidental. Patient and caregiver subjects were recruited from online panels and invited by email to participate in the survey. Adults with schizophrenia were not required to currently be on medication for their schizophrenia symptoms in order to participate in the survey; 21% of the participants were not taking medication at the time of the survey. Adults

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with schizophrenia self-reported their diagnosis and medication history, which was not confirmed with a physician.

2. Surveyed adults with schizophrenia who have ever taken schizophrenia medication.
3. Surveyed caregivers whose loved one has ever taken schizophrenia medication.
4. When directed to select one of two choices.
5. Many survey questions allowed for multiple responses rather than a single choice. Therefore, the total of all choices does not equal 100%.
6. Conclusion is based on interpretation of multiple data points.
7. The objective of the Living with Schizophrenia survey was to understand patient, caregiver and physician perceptions and opinions of living with schizophrenia, caring for someone who lives with the disease and treating patients with the disease. Specifically, the survey sought to collect data on feelings, especially those of frustration, regarding various aspects of living with and managing schizophrenia, including medication.
8. Physicians were recruited through standard mail to participate in an online survey, relying on the American Medical Association (AMA) master file as the sampling frame. Raw data were weighted on the basis of years in practice, sex, and region to reflect the population of practicing U.S. psychiatrists. No estimates of error can be or were computed.
9. Small base (n<100) – results should be interpreted as directional only.
11. Reported results are excerpted from the full data collected. To access the full data set, please contact Kimberly Whitefield at Otsuka (kimberly.whitefield@otsuka-us.com) or Nick Przbyciel (nprz@lundbeck.com) at Lundbeck. Results reported were selected based on best applicability to survey objectives.