determine the MHL level of the general public. Hence, we conducted a large-scale internet-based survey of 3000 citizens, to clarify the knowledge, attitudes and behaviors of the general public with respect to "prevention of and recovery from mental illness."
Methods: We conducted a survey of 3000 citizens (aged 18 to 79 years, 1483 males and 1517 females) to determine their MHL level, using a questionnaire posted on the internet. The survey consisted of 22 questions about MHL, grouped into 8 categories.
Results: The results of our survey were as follows:

(1) Impression of mental illness:
Regarding the question on their impression of mental illness, more than 70% of the respondents answered, "I think it is scary." This answer was especially likely to be given by younger respondents.

(2) Knowledge of mental illness:
Regarding the question on whether mental illness is related to the living environment and also to suicide, more than 90% of the respondents answered, "I think so." However, a small proportion of the respondents were aware that mental illness begins in adolescence (65.0%) and that only physical symptoms manifest in some cases of mental illness (40.2%).

(3) Awareness of the importance of mental health:
Regarding the importance of mental health, 94.1% of the respondents answered, "I think so."

(4) Attitudes and behaviors toward people with mental illness:
Of the respondents, 20% to 30% had interacted with people with mental illness at home, school, workplace or in their neighborhood. Of these, 62.0% thought that they could maintain friendship with them. However, 39.6% of the respondents did not want to live with them, 25.2% did not want to work with them, and 32.0% did not want to live near them; thus, many of the respondents had negative thoughts about establishing close relationships with people with mental illness. The percentage of respondents with such negative thoughts increased with age.

(5) Identification by the subjects of the survey of depression, schizophrenia, anxiety disorder and eating disorder using vignettes:
The identification rates of the diseases were as follows: depression (27.3%), schizophrenia (33.7%), anxiety disorder (63.5%), and eating disorder (82.2%). The identification rate of schizophrenia was higher in respondents between the ages of 20s to 40s and decreased in older age groups.

Discussion: It was found that in Japan, many citizens were aware of the importance of mental health, but that there was still a stigma attached to people with mental illness. In addition, they were found to be still poorly aware of representative mental illnesses, such as depression and schizophrenia. For improving these aspects, the MHL level of the general public needs to be further improved. In Japan, it has been pointed out that education on mental health is insufficient. However, education on mental health as a course on "prevention of and recovery from mental illness" is expected to be started in high schools in 2022. This would be expected to further improve the MHL level of the general public in the near future.

T131. EVENT RELATED POTENTIALS (ERPS) DURING FREE VIEWING OF IMAGES WITH INCREASING SEMANTIC COMPLEXITY IN SUBJECTS' AFFECTED WITH SCHIZOPHRENIA

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Background: Currently, the diagnosis of schizophrenia is made solely based on interviews and behavioral observations by a trained psychiatrist. Technologies such as electroencephalography (EEG) are used for differential diagnosis and not to support the psychiatrist's positive diagnosis. Here, we show the potential of EEG recordings as biomarkers of the schizophrenia syndrome. EEG (electroencephalography) differences between patients with schizophrenia (SCZ) and controls have been reported. Tasks used are complex and specialized, not necessarily resemble natural stimuli/ environment to which the brain is adapted. We tested if SCZ global cognitive deficits could be described by EEG features using an ecological and simple approach.
Methods: We recorded EEG while schizophrenia patients freely viewed natural scenes, and we analyzed the average EEG activity locked to the image onset. We compared occipital ERPs obtained from 11 subjects with SCZ and 9 aged-- matched healthy controls (HC) during free-- exploration of images. Image categories included Plain Gray, Pink Noise and Landscapes (n=10 each). ERPs locked to image onset were obtained from occipital electrodes ader ocular artifacts rejection (by ICA decomposition).
Results: We found significant differences between patients and healthy controls in occipital areas approximately 500 ms after image onset. These differences were used to train a classifier to discriminate the schizophrenia patients from the controls. The best classifier had 81% sensitivity for the detection of patients and specificity of 59% for the detection of controls, with an overall accuracy of 71%. We observed a positive wave after NS (natural scenes) landscape image onset, with late differences between the SZ patients and HCs. After visual inspection of the ERPs from each area (frontal, central, parietal, and occipital), we found significant differences only in the occipital ERP. It had two positive peaks in the HCs but a reduced second peak in the SZ patients. The median ERP at 0.4–0.6 s after image onset for the HCs was 4.14 μ V and 1.55 μ V for the SZ patients. The patients had a significant decrease in their ERP amplitude compared to the HCs ($p = 0.01$, $Z = -2.5$, $T = 82$, WRS test). Only the occipital electrodes showed differences in this period with the NS images. No other differences between the HC and SZ groups were found at other locations or time periods.
We found significant differences between HC and SZ groups at the occipital electrodes only for the NS. Neither gray ($p = 0.29$, $Z = -1.06$, $T = 101$, WRS test) nor pink noise images ($p = 0.93$, $Z = -0.07$, $T = 114$, WRS test) showed significant differences between the HCs and SZ patients at any group of electrodes at this or any other time period.
With an accuracy of 71% we are able to classified subjects. We performed 1350 cross--validation leaving 4 subjects out (two SCZ and two controls). 70.5% of the subjects with schizophrenia were correctly detected.
Discussion: This study shows that EEG features can differentiate between SCZ and HC in a simple, instruction--free visual task. Differences in late potentials (>300 ms) and in more complex images suggests deficits in top--down (cognitive) rather than bottom--up (perception) mechanisms.
These results indicate that EEG signals from a free-viewing paradigm discriminate patients from healthy controls and have the potential to become a tool for the psychiatrist to support the positive diagnosis of schizophrenia.

T132. RETINAL GANGLION CELLS DYSFUNCTIONS IN SCHIZOPHRENIA PATIENTS

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Background: Structural and functional retinal anomalies are documented in neurologic, substance use and psychiatric disorders. In schizophrenia, flash electroretinogram (fERG) measures have revealed photoreceptors, bipolar cells and retinal ganglion cells (RGC) dysfunctions. To date, no study has explored RGC using a pattern electroretinogram (pERG) protocol as recommended by the International Society for Clinical Electrophysiology of Vision (ISCEV) standards for RGC measurements. We aim to study