**Motivation and Objective**

- **Zero-shot C-SSRS**: All users diagnosed with Depression/Panic Disorder report symptoms of suicidal ideation, with death occurring between 10-15%.
- **Mental health condition transitions to suicide**: Suicide is a complex process with a broad range of mental health conditions.
- **Transition of suicide condition to social media**: Suicide is a complex process with a broad range of mental health conditions.
- **Social media as a tool for suicide risk assessment**: Suicide is a complex process with a broad range of mental health conditions.

**Contributions**

- **Dataset of 2181 users who potentially show suicidal tendencies on Reddit**: Development of a comprehensive lexicon of suicide-related symptoms using C-SSRS categories as labels with help from domain experts.
- **Reddit is a widely used and highly relevant social-media platform where users share their experiences on specific subreddits**: Transition from a mental health condition to suicide is slow.
- **The data obtained from Reddit comprises of posts from 550,000 users**: Sample users' posts defining suicide indication, suicide ideation, suicidal behavior or suicide attempt on social media. We observed higher proportion of terms like death, hopelessness, sorrows, sadness, loneliness, commit suicide, gun, kill, death, trans (referring to transgender), and therapy in the content. Such terms helped us in identifying risk candidates. Some of the celebrity profiles associated with these keywords were: Robin Williams, Kate Spade, and Freddy E.
- **Anonymous for recovery and tend to share their experiences and opinions who are likely addicted to alcohol, drugs, or have joined Alcohol/Drug Subreddit**: Reddit that involves conversation on topics that are related to the title of the subreddit. For example, Addiction subreddit contains posts from users across 16 mental health subreddits. A subreddit is like a forum within Reddit which contains dedicated conversations around a specific topic.
- **We explain components of the architecture below**: Generate a coherent dataset that guides our summarization and question answering process. We have extracted users' posts from Reddit and analyzed their mental health conditions using a combination of health-related and general content.

**Architecture and Approach**

**Exploratory Data Analysis**

- **Sample of Reddit users showing suicidial behavior, suicidal ideation, suicidal behavior, and suicide attempt**: The data obtained from Reddit consists of posts from 550,000 users. We observe higher proportion of terms like death, hopelessness, sorrow, sadness, loneliness, commit suicide, gun, kill, death, trans (referring to transgender), and therapy in the content. Such terms helped us in identifying risk candidates. Some of the celebrity profiles associated with these keywords were: Robin Williams, Kate Spade, and Freddy E.
- **Development of a comprehensive lexicon of suicide-related symptoms using C-SSRS categories as labels with help from domain experts**: The data extracted from Reddit is unstructured and noisy. Hence we created a pipeline to generate a coherent dataset that guides our summarization and question answering process. We have extracted users' posts from Reddit and analyzed their mental health conditions using a combination of health-related and general content.

**Conclusion and Future Work**

- **In our current study, we have used state-of-the-art deep learning and word embedding techniques supported by medical knowledge bases and a lexicon to enhance C-SSRS risk assessment to detect suicide ideation and intention**: We use deep learning and word embedding techniques supported by medical knowledge bases and a lexicon to enhance C-SSRS risk assessment to detect suicide ideation and intention.
- **In future, we plan to incorporate our approach using ROUGE metrics and our own corpus**: We plan to incorporate our approach using ROUGE metrics and our own corpus.

**References**