

Collecting patient insights to shape development of a novel digital Cognitive Behavioural Therapy (dCBT) for IPF patients

Jessica Shull, Rohit Batta, Vicore Pharma

Objectives

Digital survey analysis to inform the development of a digital Cognitive Behavioural Therapy (dCBT) for IPF patients.

Background

The global reach of the COVID-19 pandemic caused a notable shift in awareness and adoption of digital technologies by physicians and patient populations. In April 2020, telemedicine usage in the US surged to 78 times the January 2020 volume, and that figure has now stabilised at a 38-fold increase. Telemedicine requires that both patient and physician communicate through digital technologies, and today many patients have started to utilise digital, internet, and mobile-based tools for health care. A recent study of seniors in community living situations found that respondents had generally positive attitudes toward digital health tools and did perceive that these tools could contribute to wellbeing.

In alignment with this acceptance of a new modality, Vicore is developing a digital Cognitive Behavioural Therapy for patients with idiopathic pulmonary fibrosis (IPF) – dCBT for IPF. IPF is an incurable condition with a median prognosis of 3-5 years from diagnosis and a deteriorating quality of life (including cough). The cause is not definitively understood, and current treatments only slow progression, therefore this diagnosis can have psychological impacts such as anxiety and depression. The Vicore dCBT is meant to serve as a daily resource for coping, understanding what daily needs are for each individual, and reduce the psychological burden. However, every patient is different

and availability of support varies. Therefore, to ensure that the patient's perspective plays a central role in the development of the product, we asked the Pulmonary Fibrosis patient population directly about their perspective with the help and support of the PF Warriors group and the EU-IPFF.

Methods

We surveyed 33 people in 6 countries who self-identified as having IPF or a PF-ILD through email and Google Forms, a purely online and anonymous market research format. Participants were informed of the development of the Vicore dCBT, a digital cognitive behavioural therapy for addressing the psychological impact of living with IPF, a product that will be delivered through smartphones and tablets, and then asked a standard set of questions regarding their age, location, and daily habits. Several long-answer questions were asked regarding individual psychological perspectives which cannot be included as statistics in this poster, but provided highly valuable insight as to the issues, unexpected obstacles, and sources of anxiety and depression that patients face.

Results

100% of people surveyed use smartphones or tablets every day, far higher numbers than some reports we reviewed. Further, these were not the youngest age group among patients with pulmonary fibrosis; 82% were in the 60-80 year old range, and 9% were over 80 years old (Table 2).

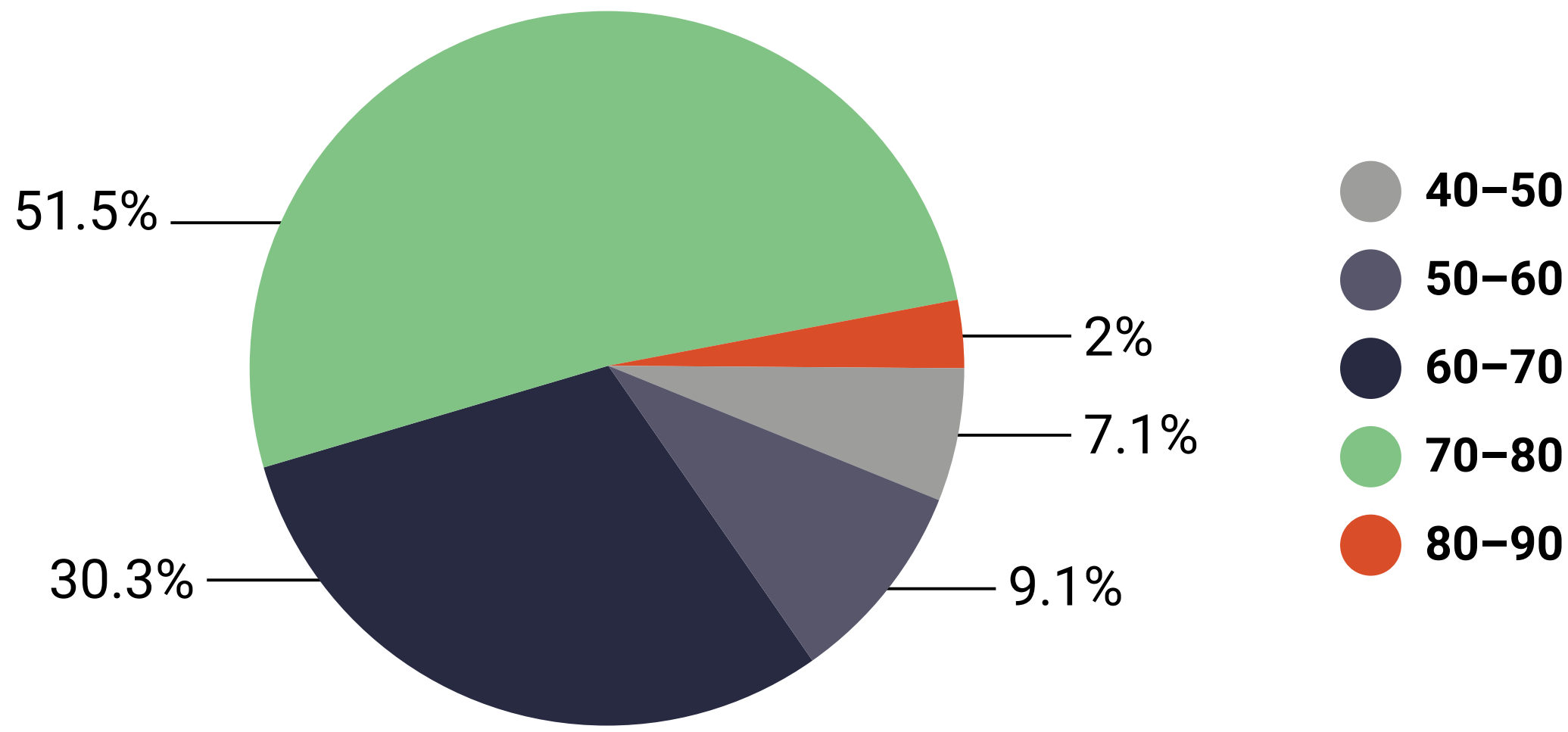


Table 2. Answers to the question "What is your age group?"

The answers to the question of what disease-related symptoms had the most impact on quality of life were also different than expected based on published data. Options included one or more of the following: shortness of breath, fatigue, cough, loss of appetite, none of these or "other". As can be seen in Table 3, shortness of breath and fatigue were selected 4 times more often than other symptoms as having had the most impact on quality of life since diagnosis. Of note, items listed in the "other" category revolved around lack of information about IPF for themselves, as well as within healthcare systems.

Conclusions

Our survey results lead to the conclusion that this population is prepared and willing to try a digital health tool that is made with them in mind.

Reports and statistics generated by online searches may not have the accuracy needed for developing a dCBT. The Vicore dCBT for IPF is to be a regulated medical device product, and patient-centric development is crucial. One report in the US by Pew Research quantified smartphone use by people over 65 at 61%. In the UK smartphone usage was estimated by iNews to be only 18% for people over 75. Our numbers were significantly higher.

Simple and cost-effective technology exists which can help to engage with patients in real time all over the world, and it is important to accurately frame their perspective so that development of products truly suits their needs. In-depth patient interviews have been undertaken to help further characterise and build the Vicore dCBT so that the product speaks to patients with the specific impact amelioration mechanisms for people living with IPF. Other patients – those with lung cancer or anxieties due to other triggers, for example – would not benefit from the Vicore dCBT in the same way.

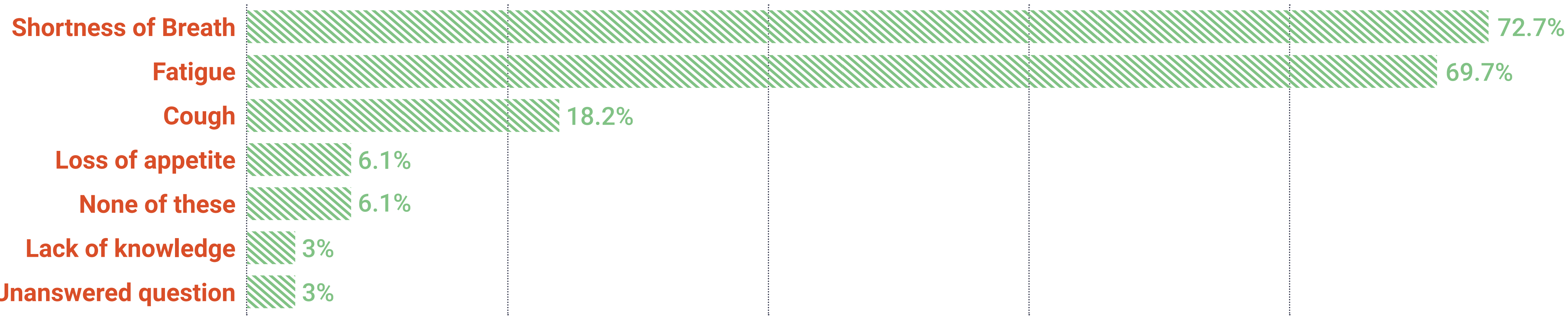


Table 3. Answers to the question "Which of these symptoms has had the most impact on your quality of life since diagnosis (one or more)?"



100 %
of people surveyed use
smartphones or tablets every day



Jessica Shull, Director of Digital Therapeutics
jessica.shull@vicorepharma.com



Rohit Batta, Chief Medical Officer
rohit.batta@vicorepharma.com

