Preference Differences Between Patients and Pulmonologists Regarding Inhalation Devices for COPD

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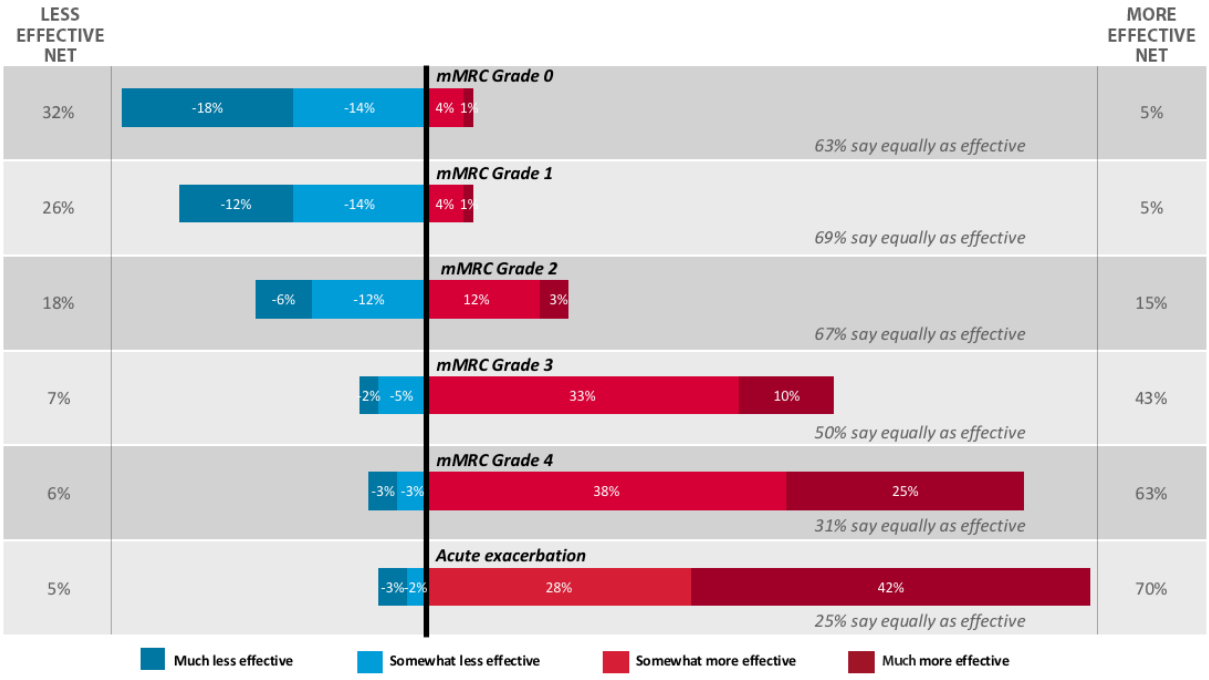
Background:
There are four inhaled delivery options for COPD – Metered Dose Inhalers (MDIs), Dry Powder Inhalers (DPIs), Soft Mist Inhalers (SMI), and Small Volume Nebulizers (SVNs). Currently, there are no guidelines or strategies as to which delivery device to use, and which patient type would benefit from these options to achieve the best clinical benefit. A purpose of this study was to determine preferences of pulmonologists and patients with COPD regarding delivery systems.

Methods:
Two online surveys were designed by a steering committee including ATS clinicians and scientists and conducted by Harris Poll between January 7 and January 29, 2016. More than 6,200 pulmonologists and fellows from the USA were solicited via email from the ATS membership roster as well as from attendees of the ATS 2014 and 2015 International Conference, all of whom had previously indicated "COPD" as a topic of interest to them. Using a database maintained by Harris Poll, patients who had previously identified themselves as having a diagnosis of COPD in the USA were sent a similar survey. A total of 205 pulmonologists and fellows as well as 254 COPD patients completed the surveys. The robust sample size (n>100) supported quantitative analysis.

Results:
As shown in Figure 1, for patients with more severe COPD, as measured by an mMRC grade of 4, 63% of pulmonologists believe that SVN therapy is more effective than other inhalation devices. 70% of pulmonologists stated that SVNs are more effective than MPI/DPI in the management of acute exacerbations. In contrast, 54% of patients with COPD at all levels of severity reported a preference for SVNs over MDI/DPI, while only 39% of pulmonologists believe that most of their patients prefer SVNs compared with alternative delivery devices. 63% of patients find SVNs easy to use, and have limited concerns about relative expense (24%) and being too time-consuming (18%).

FIGURE 1:
PERCEIVED EFFECTIVENESS BY PULMONOLOGISTS OF NEBULIZED THERAPY COMPARED WITH MDI/DPI



BASE: PULMONOLOGIST/FELLOW (n=205)

Q916 Compared to metered dose inhalers (MDI) or dry powdered inhalers (DPI), do you find hand-held (small volume) nebulizers more effective or less effective for each of the following COPD patient groups?

Conclusions:

Our findings show differences in preferences for nebulized therapy compared with alternative delivery systems for patients with COPD. Our results suggest that there are educational and communication opportunities to guide clinicians regarding selection of optimal delivery system. There is a disparity between patients with COPD and pulmonologists regarding perceived effectiveness of nebulized therapy.