OBJECTIVE

Background
- People with diabetes on insulin are at risk of severe hypoglycemia – an unpredictable, life-threatening event that requires assistance from others for recovery.
- There is significant unmet medical need to improve successful administration of glucagon as rescue therapy for severe hypoglycemia among non-health care professionals.

Research Objective
- To compare overall attitudes toward two potential new rescue devices, nasal glucagon and autoinjector glucagon, for treatment of severe hypoglycemia among three stakeholder groups: persons with Type 1 or Type 2 diabetes on insulin, caregivers of persons with diabetes, and acquaintances of persons with diabetes.

STUDY DESIGN

Two study phases:
1. Phase 1: Concept elicitation interviews to identify important devices attributes
2. Phase 2: Two rounds of cognitive interviews to test new questionnaire assessing attitudes toward nasal glucagon versus autoinjector glucagon: the Glucagon Device Preference Questionnaire (GDPQ)

All participants recruited via a general population panel in the USA.

CONCLUSIONS
- A device with nasal delivery of glucagon is preferred over an autoinjector for several reasons, including being less complicated and avoiding a needle injection, as demonstrated based on the Phase 1 qualitative interviews.
- The Glucagon Device Preference Questionnaire (GDPQ) differentiated attitudes between nasal glucagon (NG) versus autoinjector (AI) glucagon.
- More participants preferred NG to AI on all direct preference items.
- More participants favored nasal glucagon over autoinjector glucagon with respect to 'Ease of use', 'Feeling protected and prepared', and 'Hesitation in using device'.

Phase 1 Results
- 73% preferred Nasal Glucagon (NG) over Autoinjector Glucagon (AI).

Phase 2 Results
- Participants favored nasal glucagon over autoinjector glucagon on all 33 rating items except one.
- nasal glucagon was perceived to be less likely to cause anxiety relative to the conspicuous and less embarrassing, and less likely to cause anxiety relative to the autoinjector.

Phase 2 Results (cont.)
- More participants preferred nasal glucagon over autoinjector glucagon on all direct preference items.

Additional information on device attributes, nasal glucagon preferred over autoinjector glucagon on all direct preference items.

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