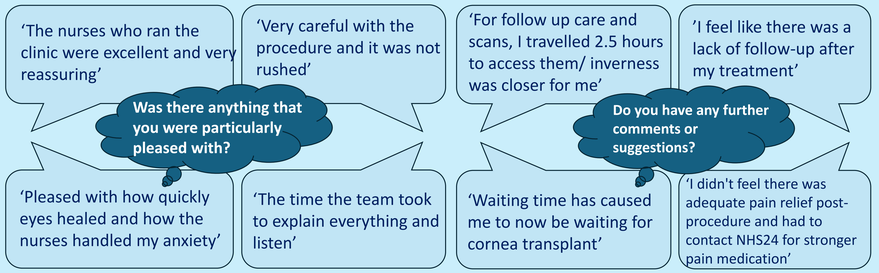
Patient Satisfaction with Nurse-Led Corneal Collagen Cross-Linking: A Tertiary Centre Experience

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Background

- Keratoconus is a progressive corneal disorder leading to thinning and cone-like bulging, causing vision impairment, glare sensitivity, and image distortion. [1]
- Corneal Collagen Cross-linking (CXL) is the gold standard for halting keratoconus progression. [2]
- Patient satisfaction is crucial in healthcare quality assessment. Factors such as communication, waiting times, and expectations influence satisfaction levels. [3]

This study aims to evaluate patient satisfaction with Nurse-Led CXL treatment at Aberdeen Royal Infirmary through targeted questionnaires, identifying strengths and areas for improvement based on patient feedback.

Method:

- **Study Design**: Retrospective cross-sectional questionnaire-based study.
- **Questionnaire**: 16 questions designed using previously validated questionnaires and NHS England's guide [4, 5, 6]. Distributed online on SNAP software and Microsoft word.
- **Participants**: 97 patients who underwent Nurse-Led CXL from December 2019 – July 2024.
- **Data Collection**:
  - Patients were contacted via email and telephone.
  - A structured questionnaire assessed various aspects of care.
  - Follow-ups were conducted over two weeks to maximize response rates.
  - Non-responders contacted 3 times.
- **Analysis**:
  - Likert scale responses were used to quantify satisfaction.
  - Open-ended feedback was categorised thematically.
  - SPSS software was used for analysis of data.

Final Response Rate: 36.1%

Key Findings

71.4% Male
28.6% Female
respondents

97.2% of patients reported being **satisfied or very satisfied** with their **overall care.**

☑ **97.2%** found the explanation **understandable,** ensuring patient confidence.

☑ **94.3%** felt **listened to** and **97.1%** felt **treated with care,** highlighting strong patient-provider relationships.

☑ **97.1%** felt their **anxiety was supported and managed appropriately**

★ **85.7%** of patients felt **follow-up advice and aftercare** was **satisfactory,** but **~15%** reported dissatisfaction with it

☑ **100% of patients were happy being treated by a trained nurse, validating the nurse-led model.**

★ **80%** were **satisfied** with **waiting times**, but **8.6%** expressed dissatisfaction due to delays.

91.4% would recommend the clinic to others, reinforcing its effectiveness.

Discussion

Strengths:
- Comprehensive and efficient questionnaire design.
- Multiple follow-ups with non-responders to increase response rate.

Limitations:
- Low response rate due to non-responders.
- Recall bias.
- Social desirability bias.

Comparison to literature:
- No previous research on patient satisfaction with nurse-led CXL.
- However, similar nurse-led treatment services found similar results and high satisfaction among patients. [7]

Recommendations:
- Ensure patients are informed on how to manage post-procedure pain.
- Continue monitoring disease progression of patients on waiting list.

Future Work

- Repeat study with questionnaires distributed shortly after treatment to evaluate satisfaction without recall bias.
- Similar nurse-led treatment clinics could benefit from adopting strategies such as implementing protocols for anxiety management.
- Interview staff about their training to create a training framework and establish how to implement similar services in other areas.
- Compare patient satisfaction with Nurse-led versus consultant-led corneal collagen cross-linking and identifying areas of improvement.

Conclusion

- There is a high level of patient satisfaction with the Nurse-Led CXL treatment in Aberdeen Royal Infirmary**.**
- Satisfaction for the Nurse-Led CXL clinic could be improved through optimising post-procedure pain relief and waiting times.
- **Future work should focus on continuing to improve patient satisfaction and implementing similar services in other locations.**

References available upon request