



Site-specific Education Using Digital Media to Improve Patients' Understanding of the Radiotherapy Trajectory: An Interventional Study

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Disclosure



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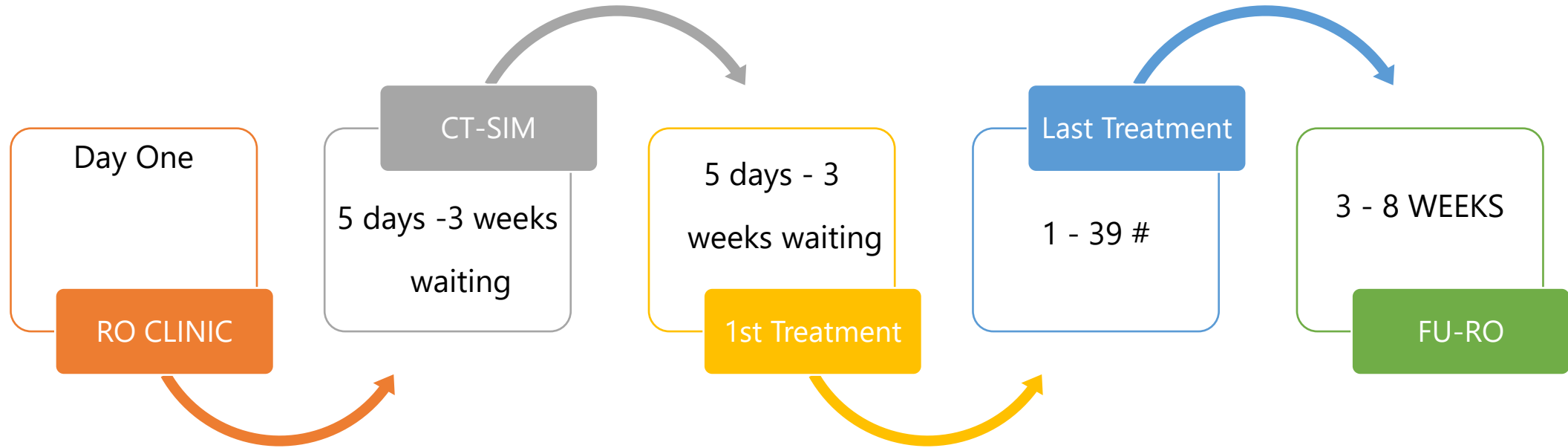
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Background

- Access to radiation therapy in Saudi Arabia has grown extensively over the past decade
- Patients receive education at the time of diagnosis, but providers noticed that much of the information was not digested or retained
- Not many Arabic speaking centers use digital media for site-specific information on radiation therapy
- **How can providers increase patients' and families' knowledge about radiation treatments?**



The Patient's Journey



MIND THE GAP!

Impact of COVID-19



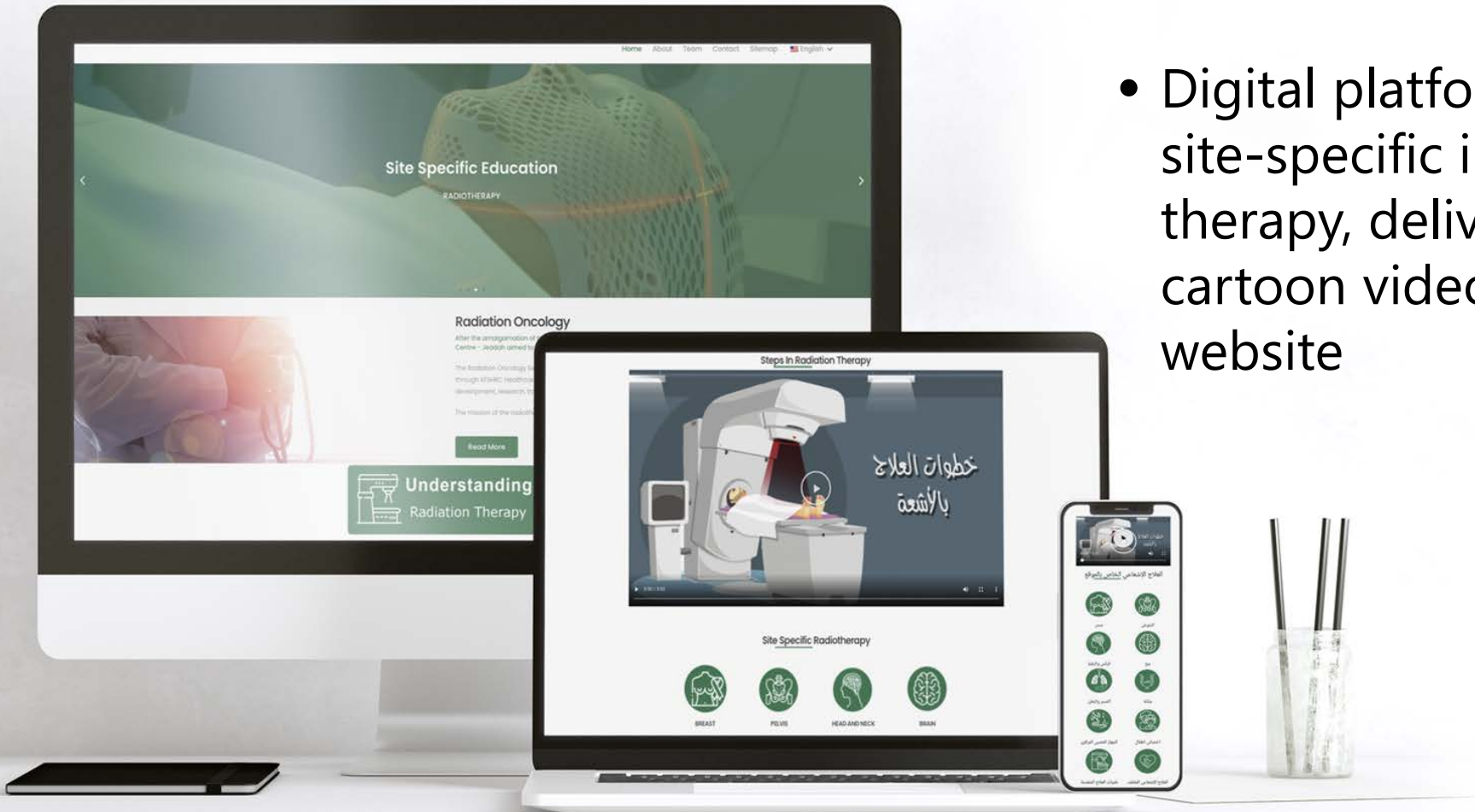
REDUCING HOSPITAL VISIT



MODERN COMMUNICATION
TECHNOLOGY

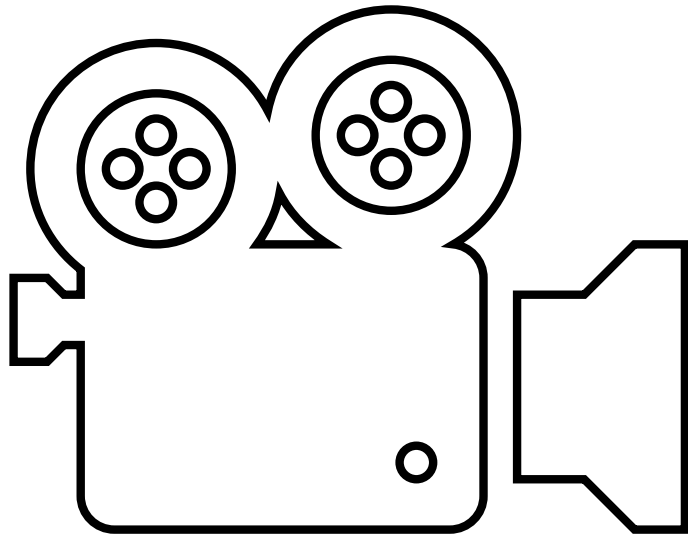
Role for Digital Media

Site-Specific Education on Radiation Therapy



- Digital platform with general and site-specific information on radiation therapy, delivered via animated cartoon videos and a patient-friendly website

One Generic Animated Video



(4 min. length)

Introduction to radiation therapy for cancer treatment

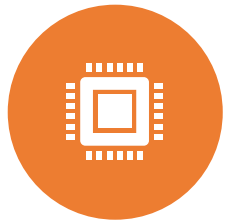
Steps involved in radiation therapy

Concise overview of patient's trajectory from referral to end of RT and follow-up



Site-specific Digital Media

- 3-to-4-minute animated videos and infographic information



CT-SIMULATION



RT TREATMENT
PROCEDURES



SITE-SPECIFIC
PREPARATION



PRE- & POST-
RT MEASURES



PRECAUTIONS

Site Specific Radiotherapy



BREAST



PELVIS



HEAD AND NECK



BRAIN



CHEST AND ABDOMEN



BLADDER



CNS



PEDIATRIC



ADVANCED TREATMENT
TECHNIQUES

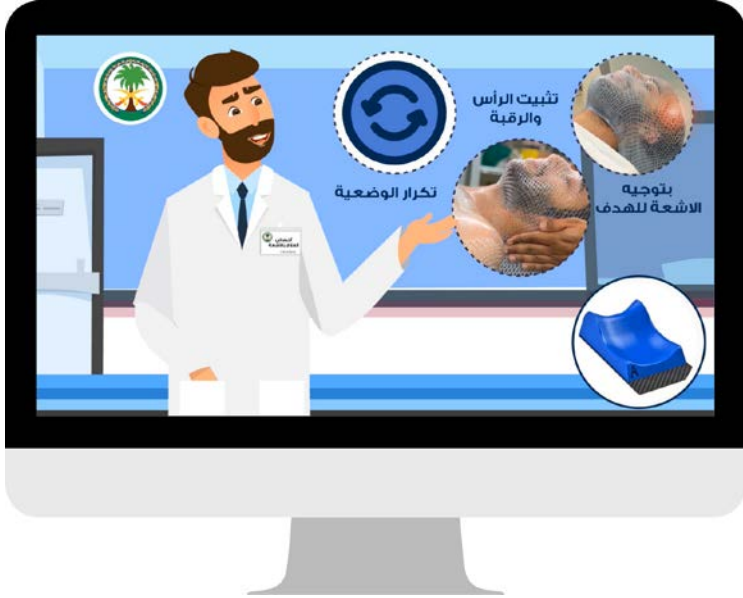


PALLIATIVE
RADIOTHERAPY

Thermoplastic Mask Formation



Bladder and Bowel Preparation



Mouth Care during Radiotherapy

عزيزي المريض:

العلاج الإشعاعي لمنطقة الرأس والعنق قد يصاحب بعض الأعراض الجانبية المحتملة، ولكنها تختلف في الشدة من مريض إلى آخر بناءً على:

- 1 المنطقة المعالجة ومكانها.
- 2 جرعة الإشعاع المقررة لكل مريض.

علمًا بأن بعض هذه الأعراض الجانبية قد تبدأ بعد ما يقارب 10 أيام من العلاج الإشعاعي، وتستمر إلى ما بعد جلسات العلاج بأسابيع.

الإسهال:

قد يشعر بعض المرضى بتقلصات أو ألم في البطن أو الحوض؛ وذلك لأن غشاء المعدة والأمعاء حساس للعلاج الإشعاعي، مما قد يؤدي إلى الإسهال

في حالة الإسهال تناول:
(أطعمة منخفضة الألياف والدهون):



1 الخبز الأبيض.



2 البطاطا مسلوقة أو مشوية.



3 اللحوم، والدجاج، والأسماك مشوية أو مسلوقة.



4 الأرز والمكرونات.



6 الموز، والجزر.



5 الشوربة مثل شوربة الأرز ومرق اللحم أو الدجاج.

الأعراض الجانبية المحتملة للعلاج الإشعاعي لمنطقة الرأس والعنق

الأعراض الجانبية المحتملة للعلاج الإشعاعي لمنطقة الدماغ:

- تغيرات في الجلد وفروة الرأس.
- تساقط الشعر.
- الكسل والخمول "الإحساس بالنعاس".
- فقدان الشهية أو الاستفراغ.
- الصداع.

Patient Impact

- Of the 14 dimensions explored, 8 were observed to have remarkable improvement
- Increased understanding and confidence score UCS.
- Gains were especially pronounced for specific dimensions, such as:
 - What to expect with radiotherapy
 - The purpose of pre-treatment tattoo marks
 - Reasons for daily or weekly imaging

Example: Understanding the purpose of the tattoo

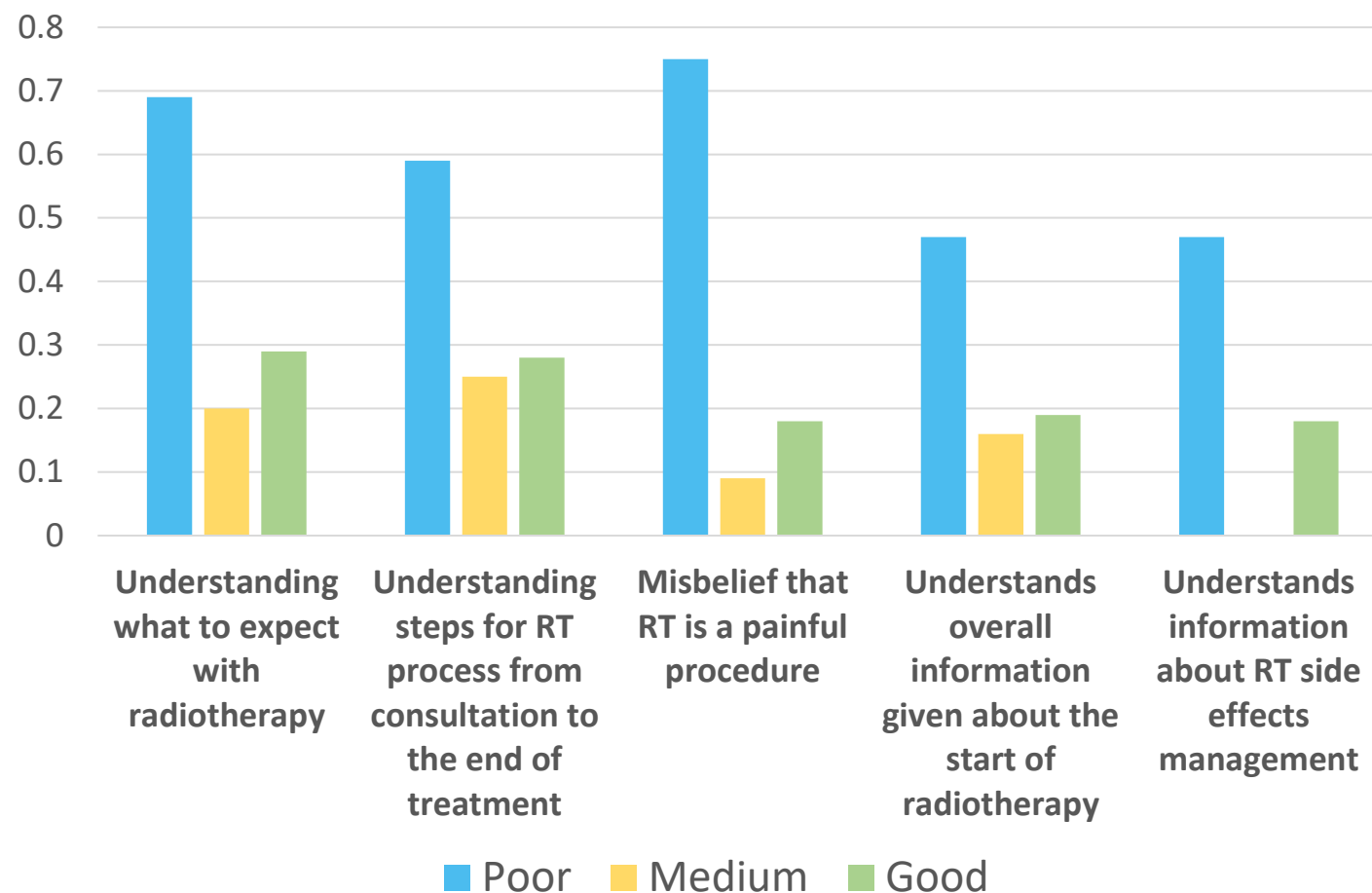
- Mean knowledge improved by ~ 0.5 out of 1 as an effect of the intervention.



Reading ability

- By analyzing each dimension separately, we observed significant associations of reading ability across five dimensions

Pre- to post-intervention change in mean score by level of reading ability



Conclusions

- The use of digital educational material in radiation oncology meets an urgent need for concise and site-specific patient education, while sparing extra hospital visits to meet with education coordinators
- Further studies are needed to assess the clinical and long-term effectiveness of this educational material