Developing an injury prevention photosphere

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INTRODUCTION

Approximately 35,000 children under 3 years old attend emergency departments (EDs) annually with an injury. In this age group, injuries are likely to occur in the home and these children are also more likely to re-attend with further injury.

Health visitors (HVs) have no guideline or tool for contacts with families post-injury. We have developed a prototype intervention to support and standardise HV practice with consequent improvements in family-centred care.

AIM

To create a framework and fully functioning pilot product:
- examine the technical means for online mark-up of markers
- revise the current prototype and create a pilot platform
- run through the process with a small group of HVs and families
- establish scale-up requirements, identify delivery partners
- identify suitable routes for follow-up funding/investment for wider scale user trials

MATERIALS & METHODS

Qualitative feedback, examples
- Focus groups with parents from three young mum’s groups and children’s centres in Bristol:
  - pop-ups with facts are good
  - prevalence data are useful
  - too much text/too difficult to understand
  - information panel red to indicate danger
  - use ‘standard’ hazard warning triangle
- Meeting with health visitors
  - realistic, makes one think
  - send text, ‘so sorry to hear about...’ and provide link
  - CAPT have good videos, gain permission to use these
  - for some parents need to introduce this/go through it
  - link to electronic records

RESULTS

- We have developed a demonstration injury prevention photosphere for an ‘unsafe’ kitchen, bathroom and sitting room
- Hazards can be identified by hovering the cursor over the hazard or clicking on it
- This ‘identifies’ the hazard and leads to a description of the danger, epidemiological data, positive prevention message and link for further information
- This provides a hi-resolution, three-dimensional view of each room from a scene scan using a mobile phone
- This photosphere has the potential to have a variety of applications and audiences.

What’s new?

- A user-centred interactive environment based on a photorealistic visualisation of the user’s own environment
- Realistic images independent of language
- Applied to any environment AGE group
- Once designed, low cost and simple maintenance
- Opportunities for peer-peer support and shared learning
- Remote assessments & reviews could be undertaken

Video example of ‘Spot the Hazard’ game

Figure 1: Messy kitchen

Figure 2 : Hazard information pop-up

Paracetamol left on the work surface

Risk: 7

Potential Danger:
- Every day, 15 young children are admitted to hospital with suspected poisoning.
- Medicines are the cause of over 70% of poisoning admissions and common painkillers are a main cause.

How can it be Prevented?
- Keep all medicines in cupboards at or above adult eye level.
- Keep medicines in their original container/blisterv pack.

REFERENCES


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