



# Nurses experiences and attitudes toward an EWSS and MET

Gerry Allen

Advanced Nurse Practitioner in Cardiology  
South Infirmary-Victoria University Hospital  
Cork







# Overview

On July 2006 introduced early warning score system (EWSS) and medical emergency team (MET)

# EWSS

NEW Symptoms	4	3	2	1	0	1	2	3	4
Concern			NEW						
Acute Chest Pain		NEW							
Acute SOB		NEW							
Seizure (new)	7777								
G.I. Bleed	7777								
<b>Physiology</b>									
Pulse (manual)	< 45	45 – 49	50 – 54	55 – 60			100 - 119	120 - 139	> 139
Resp Rate (bpm)	< 10					20 – 25	26 – 30	31 – 36	> 36
Oxygen Saturation	< 88	88 – 90	91 - 95						
Systolic BP (mmHg)	IS < 90	90 – 99	100 – 110			Rises by 20 – 29	Rises by 30 – 40	Rises by > 40	
Or	Falls > 40	Falls by 31 – 40	Falls by 20 - 30						
Level of Consciousness					A		V	P	U
Core Temp (c)	< 34	34.0 - 35						40.0 - 40.4	> 40.4

Score	Instructions
5 – 7	<p>Confirm with Nurse in-charge <i>then</i>  <u>Fast bleep</u> SHO or Registrar of patient's speciality</p> <p>Fast Bleep: Dial 462 – 'bleep No.' + 'Ext. No.'</p>
<b>8 or more</b>	<b>Activate M.E.T. Dial 7777</b>

**A = Alert + orientated**  
**V = Responds to verbal commands**  
**P = Responds to painful stimuli**  
**U = Unresponsive**

EFFECTIVE DATE:	24 – 10 – 2007
WRITTEN BY	Gerard Allen RO
APPROVED BY	Resuscitation Committee

# Medical Emergency Team

- If the score was 8 or more the staff member dialed **7777**

Bleeps activated

***'Medical Emergency Male Medical Ward'***

- Medical Registrar
- Medical Intern
- Resuscitation Officer

# Results

- Reduced length of in-hospital stay
- Reduced numbers of cardiac arrest
- Decrease in unplanned ICU admission
- Clearly identified those most at risk of sudden death

Between 18 – 62% of cardiac arrests  
which occur at ward level are  
preventable

*Hodgetts et al 2002*

*Nurmi et al 2005*

# Studies so far.....

- MERIT 2005
  - Only 34% of patients admitted to ICU were seen by the MET
    - Failed to educate MET on how to manage critical illness at ward level
    - Poor staff education on how to use the EWS tool
    - Lack of confidence in calling for help
    - Failure to break traditional habits
- Bellomo et al 2006
  - Failure of nurses to utilize the EWS tool and activate a MET call

# Going forward

- Nurses experience high degrees of uncertainty and anxiety when using EWS tools..... Thus leading to a failure to seek expert help

*Coiffe 2000*

*'nurse decision making is complexed...*

*Relying on past experiences or their senior colleagues before making a MET call'*

# Importance of education

- Through slow and systematic education programs MET referral rates increase
  - Pre 25 calls / 1000 admissions
  - Post 79 calls/ 1000 admissions

*Jones et al 2006*

# Time line for implementation

- Resuscitation Committee (early 2006)
- Executive Management Board (May 2006)
- Consultants (June 2006)
- Nursing, Paramedical, and NCHD's (June 2006)
- **Implementation Date 16<sup>th</sup> July 2006**

# Education

- ALL members of hospital staff were invited to 30 minute education sessions over 6 weeks
  - Conference room and Dept based education
  - Policies were drawn up by Resus committee
  - Intranet sites set up for guidance and accessibility to information regarding EWSS and MET
  - NCHD induction days targeted
  - General staff induction days targeted

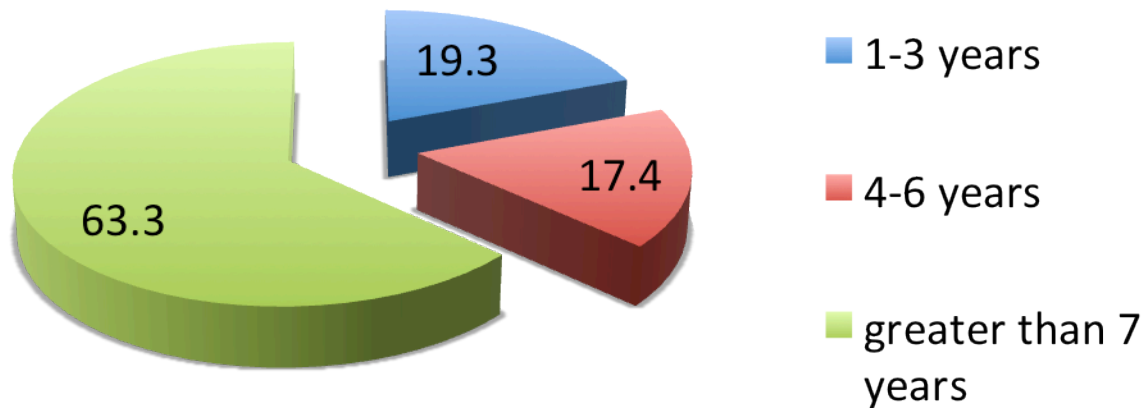
# Study

- Descriptive study involving a questionnaire developed by Green and Allison (2006)
  - Consisted of 3 sections
    - 1 – Seniority and exposure to EWS and MET education
    - 2 – Likert scale probing attitudes and experiences toward the EWS and MET
    - 3 – Consisted of 9 open-ended questions

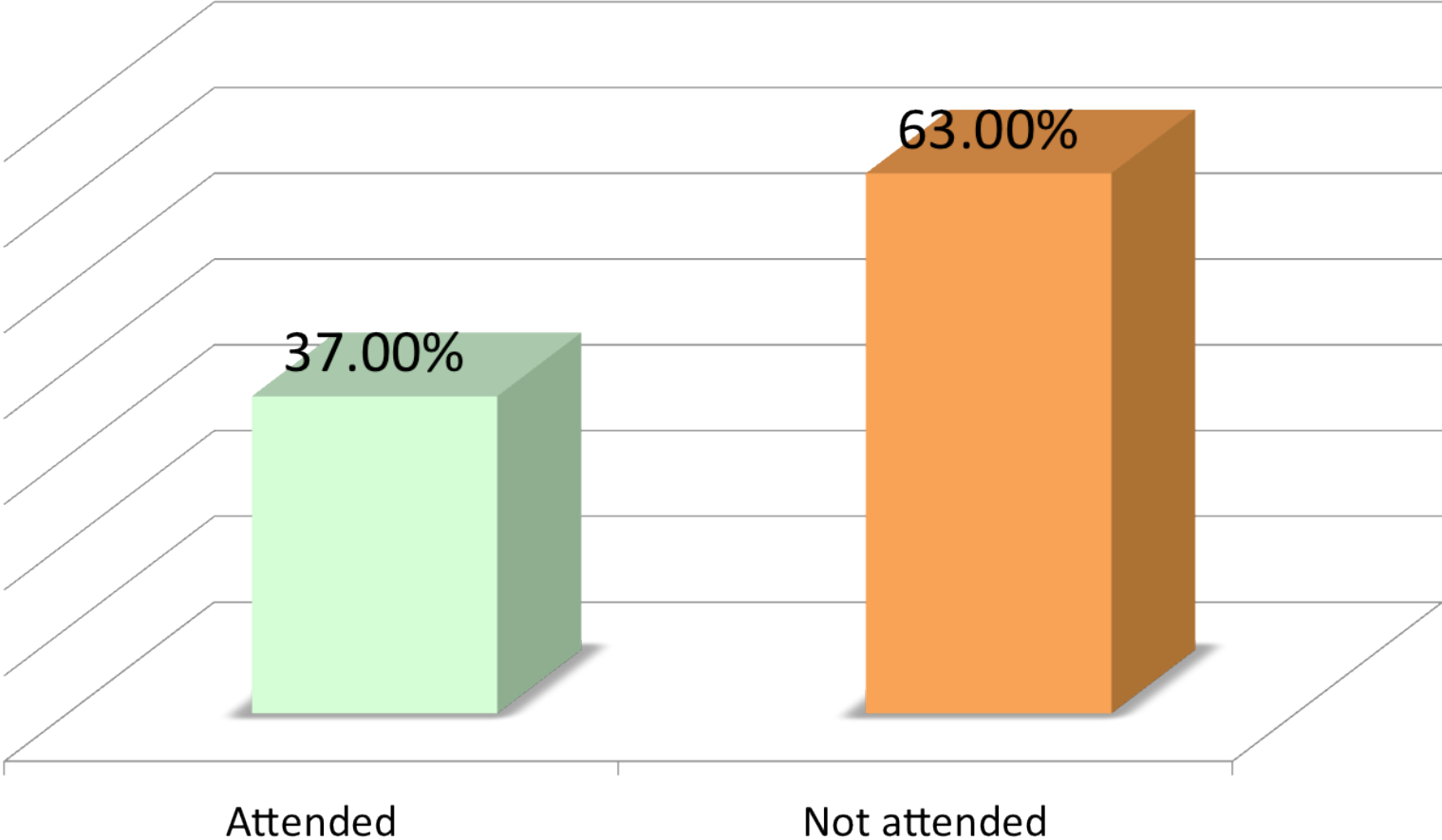
# Results

- 200 surveys were posted and 109 returned completed (56%)

**Respondents Years of Experience (%)**



# Attendance of formal In-service on EWSS and MET

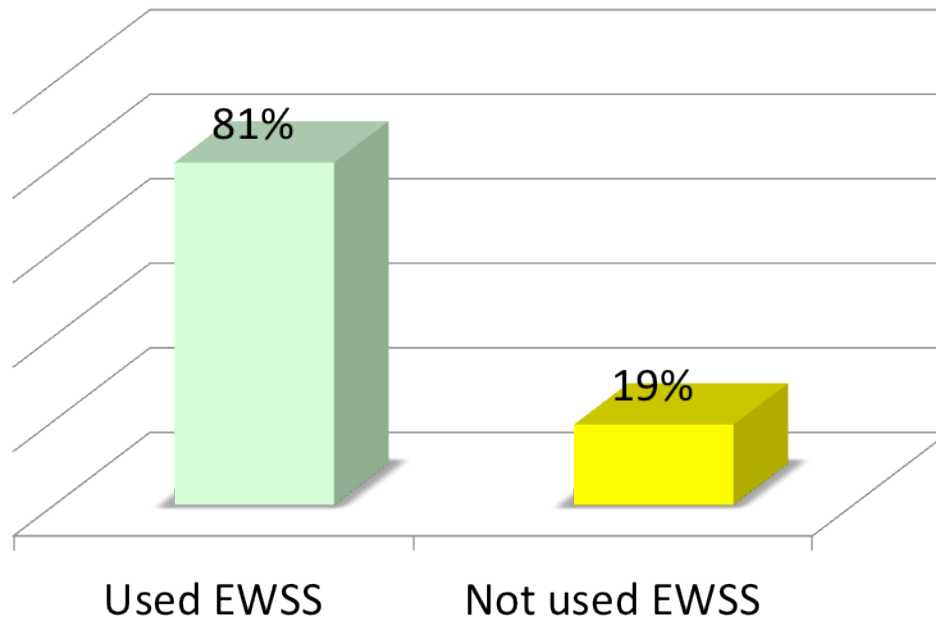


# Education

- Even though 63% did not attend formal education on EWSS or MET
  - 75% were aware of the MET intranet site
  - 91% had read the policy and activation guidelines

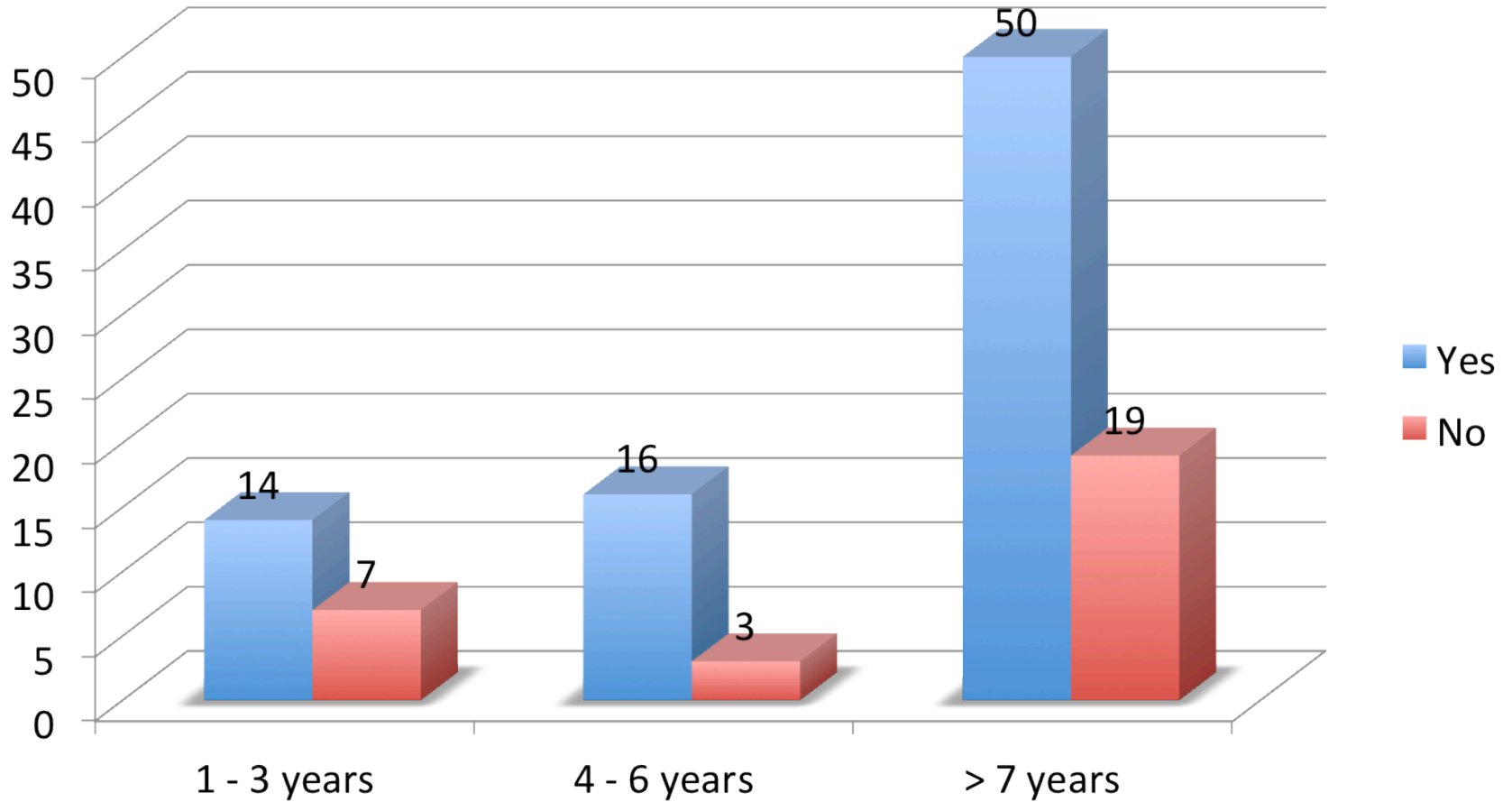
# In-service training and willingness to use the EWSS and MET

- 81% of nurses used the EWSS to assess a patient
- Only 32% attended an in-service training on EWS within the last 12 months

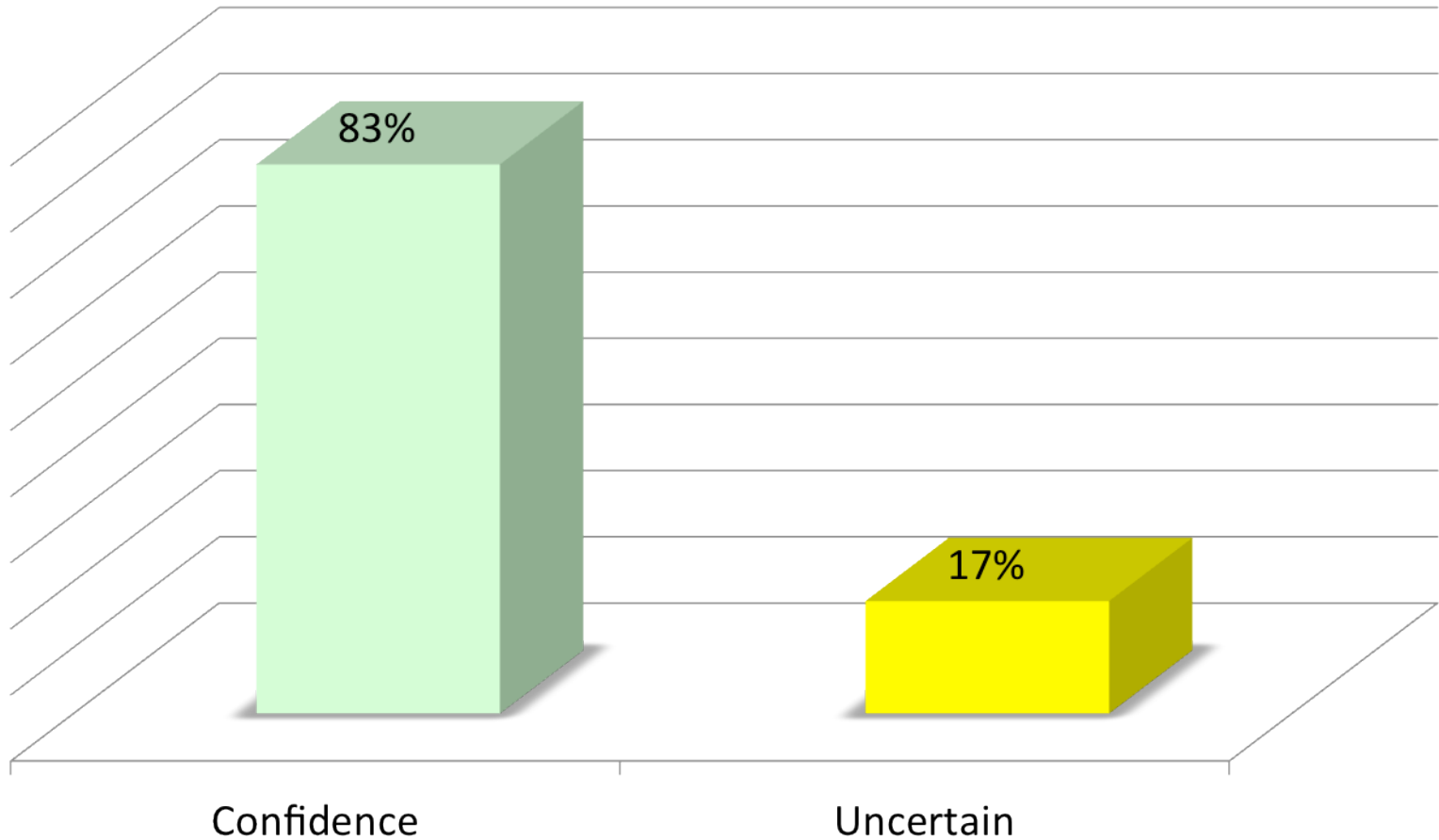


Formal education and  
Willingness to use EWSS and  
MET  $p=0.062$

# Nurses years of experience and using the EWSS and MET

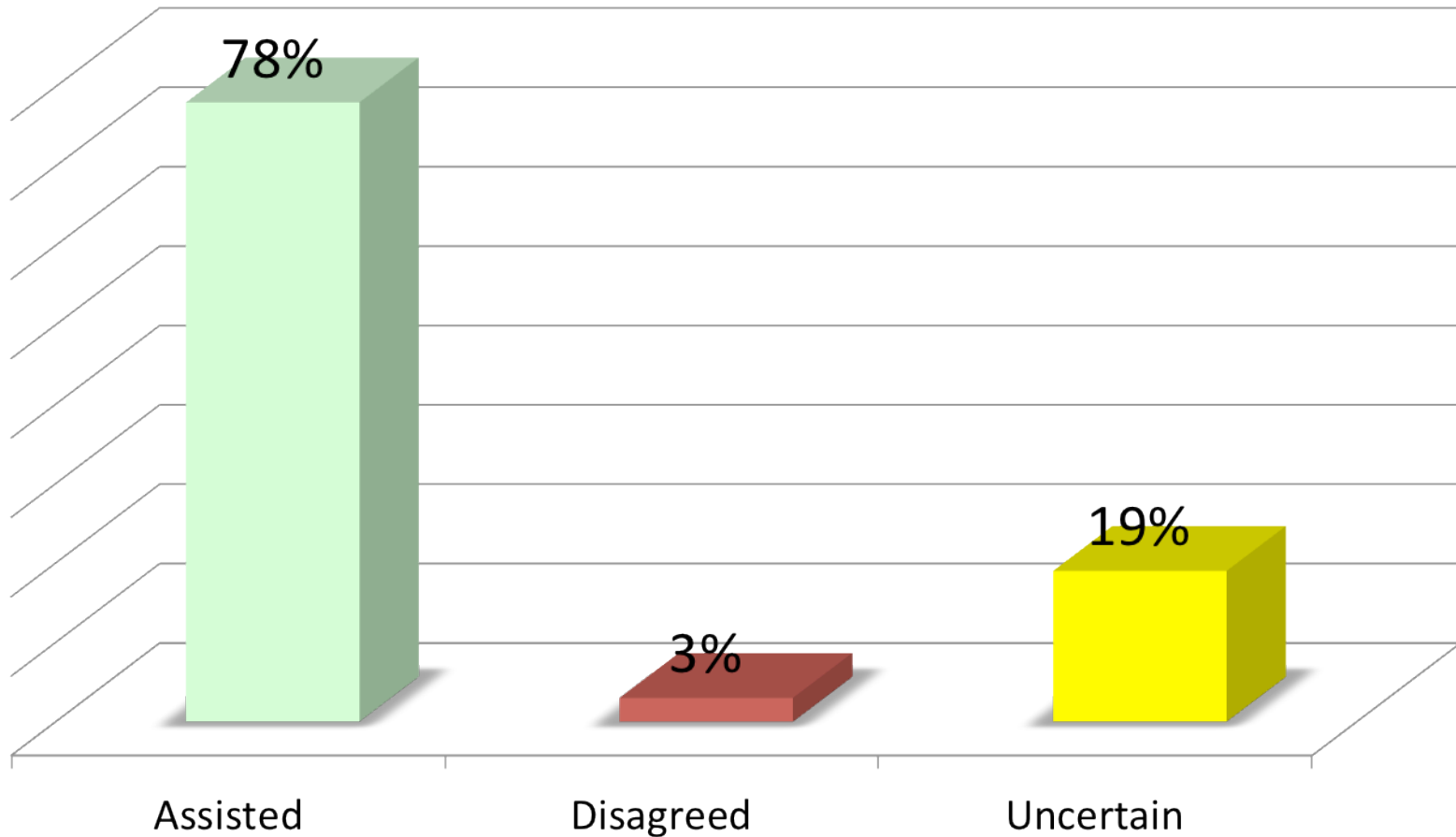


# Confidence with decision to use EWSS and activate a MET call

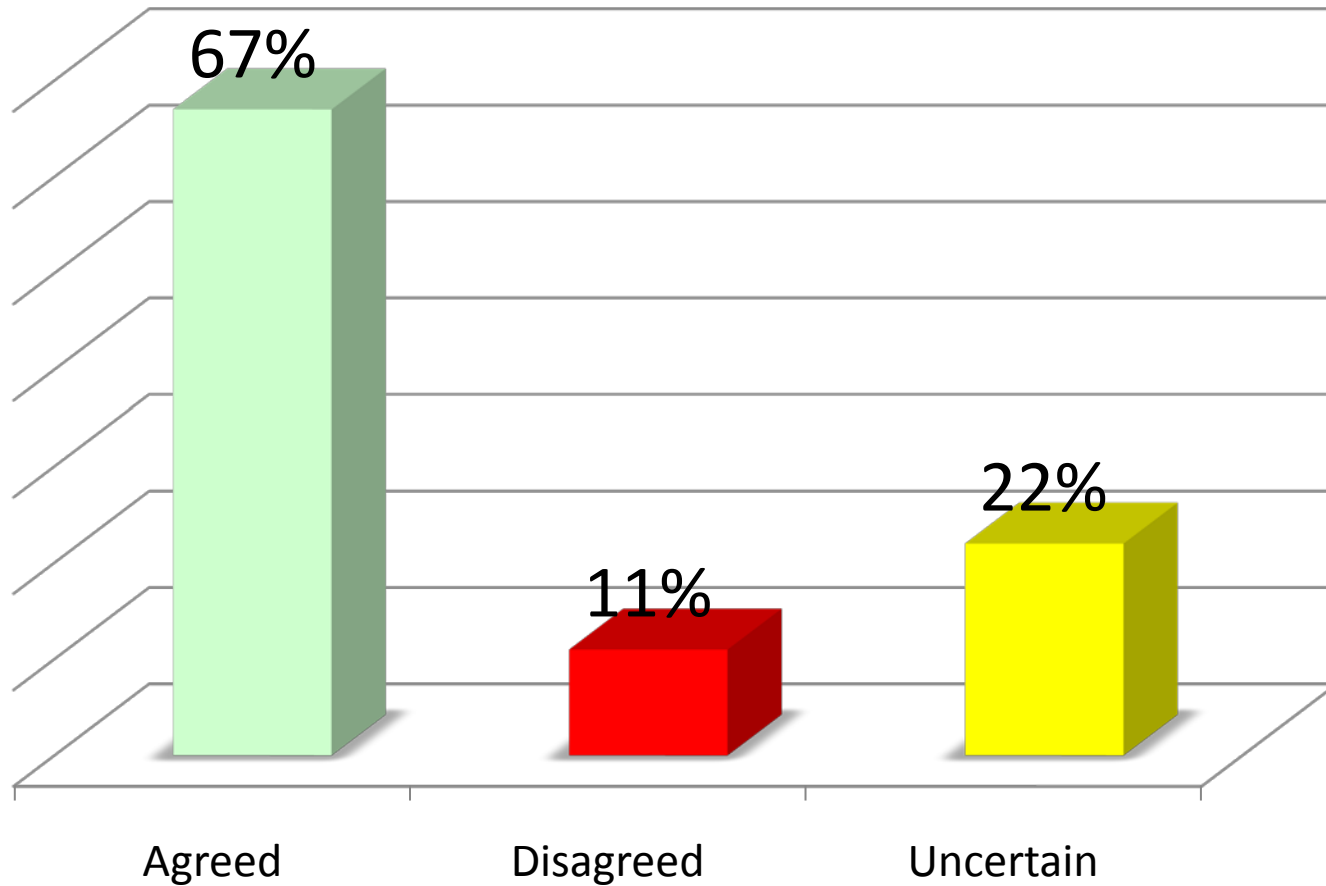


**Years of experience vs Confidence**  $p=0.01$

# Does the EWSS assist you with early identification



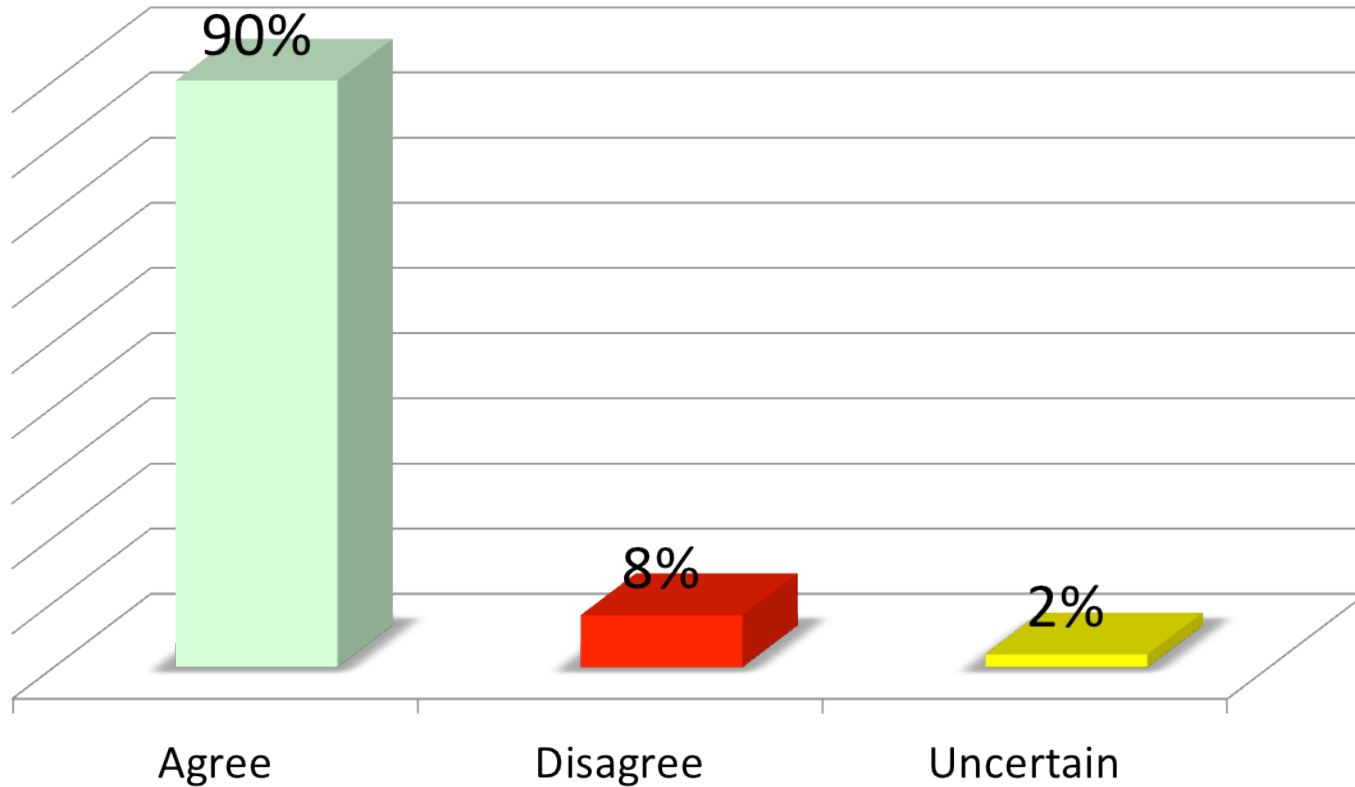
# Is the EWSS linked with better outcomes



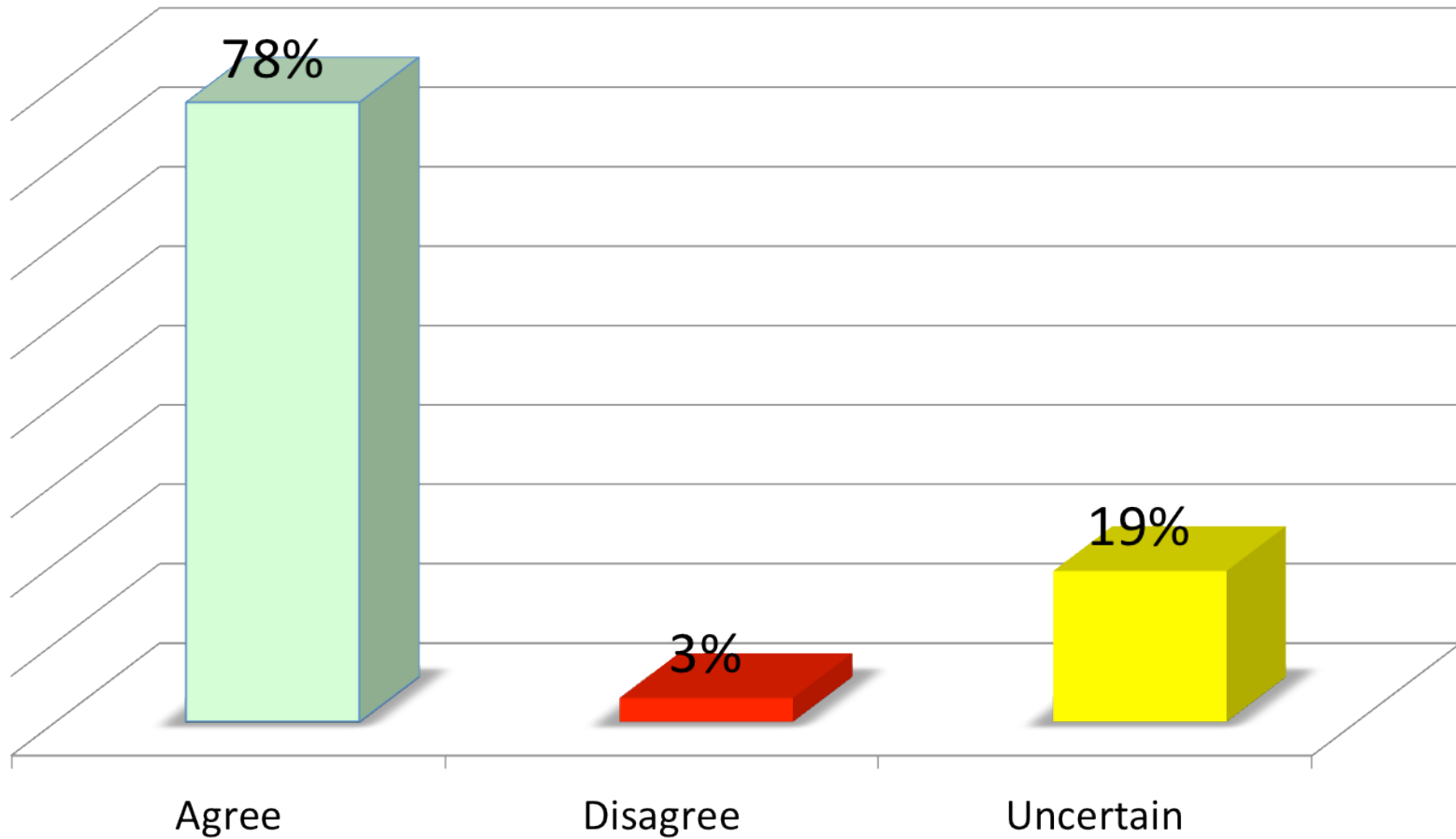
# Level of satisfaction associated with EWSS and MET

Level of agreement	Agree	Uncertain	Disagree
Satisfied with management of unstable pts	87%	10%	3%
Level of nurse satisfaction when dealing with unstable pts	73%	23%	4%
Enhanced my clinical experience	75%	20%	5%
MET adds to work satisfaction	81%	16%	3%

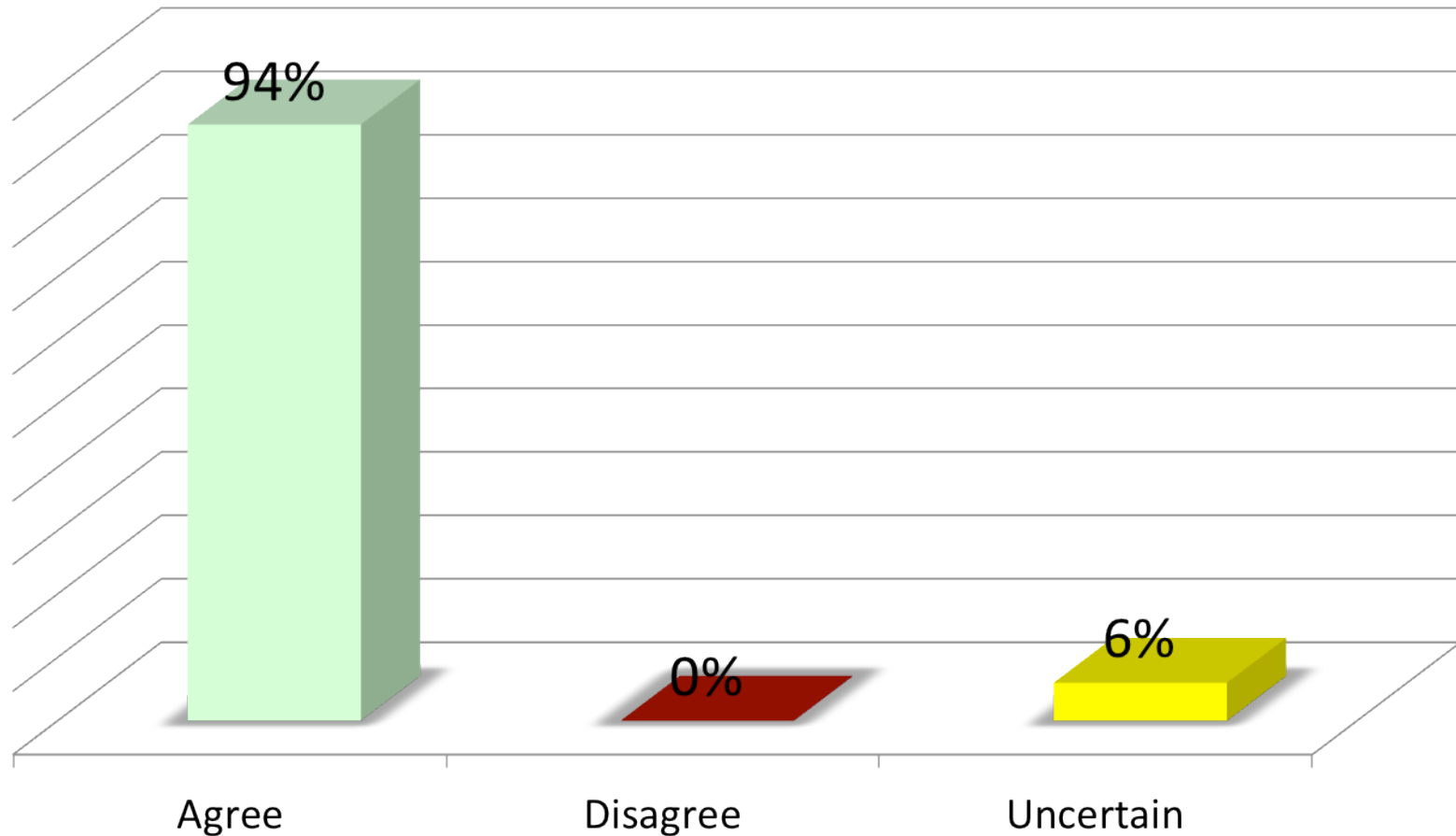
# Comfortable with decision to call the MET



# Do the MET adequately address the patients complaint?



# Do nurses believe an EWSS and MET system should be introduced in other hospitals?



# Thematic analysis

- Better patient care
- Provides support for nurses
- The EWSS tool easy to use
- More education

# Comments

- *'I found that the EWSS tool has given me confidence in proving the need for expert help and reduces delays in expert treatment'*
- *'An excellent and fast support network'*

# Summary

- The EWSS identifies patients most at risk of deterioration and that using it was associated with better outcomes
- Added to work and job satisfaction
- Levels of confidence grew with greater clinical experience

Thank you



Teamwor