
THE USE OF TECHNOLOGY IN CLINICAL SERVICE DELIVERY DURING NATURAL DISASTERS. AN ENDOSCOPY CASE STUDY AT VILA CENTRAL HOSPITAL, 2023.

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VANUATU 4TH HEALTH RESEARCH SYMPOSIUM

Port Vila, Vanuatu

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INTRODUCTION

- The disaster response mechanism is predicated on information (needs assessment)
- Vanuatu doesn't have an electronic medical records. Other regional countries; Fiji has a PATIS.



BACKGROUND:

- Information collected from clinical interaction with patients informs clinical decision making
- In Vanuatu, as in many low resource settings, patient information is stored in hard copy records.
- During times of disaster, clinical interaction with patient may be difficult and or patient files may be difficult to access



PATIENT RECORDS



RESEARCH QUESTION

During disasters, what technological solutions for aiding clinical communication, are available in Vanuatu?



METHODOLOGY

- A pre-planned visiting gastroenterology team was sent to Vanuatu by the New Zealand Medical Treatment
- Patient enrollment via conventional referral channels was very low.
- Very few referrals were made from hospital departments and or from General Practitioners



DILEMNA

AN URGENT CLINICAL SERVICES DELIVERY
REQUIRING
A TECHNOLOGICAL SOLUTION TO BRIDGE PATIENT AND
CLINICAL SERVICE PROVIDERS



METHODOLOGY

1. TWO FACEBOOK POSTS WERE MADE & PROMOTED
 - INDICATIONS FOR GASTROSCOPY & COLONOSCOPY
 - CALL TO ACTION TO MESSAGE ME ON MESSENGER





Sale Tamata Vurobaravu

15 Aug · 🌐



Bel blo yu stap soa?
 Kakai stap kam antap?
 Yu kat Gastric?
 Bel blo yu stap hot?
 You gat gas?
 You traot blad?
 Traot black samting?... See more



kakai o kakai i stap tas? - NU

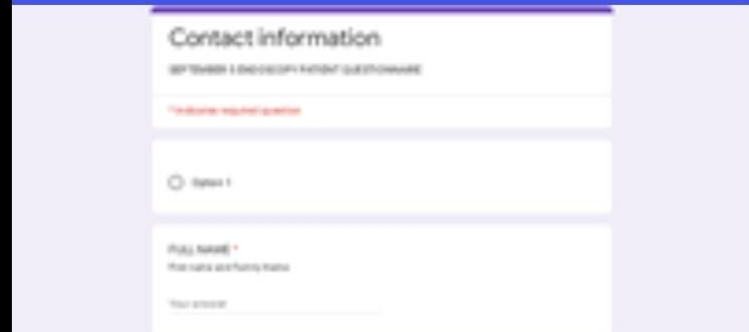
- Yu i bin lukim blood i stap lo traot blo you or sisit i stap black o sisit blad? - NO
- Yu vomit/ traot oltaem? - NO
- Blad blo yu i stap drop? Anemia? - NO



Tank yu tumas

15 AUG AT 5:34 PM

<https://docs.google.com/forms/d/e/1FAIpQLScLE9N8-gwM2wsoXg5xk8aD8V-KNvbsPcJR4GbUXe-QvQLXaQ/viewform>



METHODOLOGY CONT...

2. NEXT, A QUESTIONNAIRE MADE USING GOOGLE SHEETS & A LINK CREATED AND SENT TO PATIENTS TO FILL OUT





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Contact information

Questions Responses **54** Settings

SEPTEMBER 5 ENDOSCOPY PATIENT QUESTIONNAIRE

Question

Option 1

FULL NAME *

First name and Family Name

Short answer text

Email adress *

for eg: Josliplip@gmail.com



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Contact information

Questions Responses **54** Settings

Symptoms/Signs & Date of onset

54 responses

Mi filim olsem i kat wan samting lo troat blo mi mo i mekem mi no save breath good

Hot, pain lo stomach

Reflux, bell i sore, go often lo toilet

Gas lo bell, bell e sta hot wetem 2001

Sore stomach below the rib gage

Mi feel pain long gut mo bel be long left side blong mi. Plenty time bel I hot.

Stomach pains and difficulty digestion. Start 08/2021

Gastric ya i startem me lo 2018 time daughter

DATE OF BIRTH(BIRTHDAY)



RESULTS:

- From August 15 2023 - September 4 2023
- 57 people responded to post (Via FB messenger)
- All if not most sent links to a Google sheet
- 53 filed out google sheets



Address/ Silip wea?	Phone number(Digicel/V	Symptoms/Signs & Date	DATE OF BI
Erakor Village	5580040	Mi filim olsem i kat wan s	04/07/1989
Bladinnear Estate	7387947	Hot, pain lo stomach	03/06/1987
Tebakor	738 2225	Reflux, bell i sore, go ofte	27/02/86
Fresh water 1	5035035	Gas lo bell, bell e sta hot	16/09/84
Freshwota 1	5381444	Sore stomach below the	22/04/1967
Beverly hills	7686153	Mi feel pain long gut mo l	11/03/1985
Ohlen Fresh wind	5641740	Stomach pains and diffic	04/08/2021
		Gastric ya i startem me lo Signs /Symptoms: - pain and sometime insic - mi stap kasem acid refl -sometime mi gat chest p - Sometime stomach blo -Sometime gas i bigwan	
Ohlen Whitehood	7307585	So ol signs/symptoms ya	20/04/1996
Ohlen Mataso Area	5553050	Gas, bloat, stomach infla	13/07/1981
Bladinia	5502030	Bel sore, gas, hungre hai	10/01/1990
Toroa (destination)	5140441	Mi go lo toilet i strong i sc	24/07/1982
Bladinier	7347140	Bel istap so	20/08/1993
Teouma. Cloud Breeze E	7783674	Mi stp feelm discomfort lo	02/08/1989
Bladinier	5365807	Commonly experiencing	13/01/1987
Independence Park	7675479	Mi bin stap filip chest i hc	04/08/1980
Tagabe	7350919 / 5242307	Mi stap kat heartburn, sa	15/02/1979
Mele village	7672220	Problem blo Gaz I Bigwa	07/08/2001
Fresh water 1	7674357 or 5428703	Head hace Bell I sor I start lo pigining for this	01/03/996
Fresh water 1	7644829 or 5114151	Head hace Bell I sor Gaz	21/08/995
Malapoa College	7380432	Back ache / shoulder bla	31/01/1993
Manples Area	(Digicel)5432100	Shortness of breath and	22/03/1989
Freshwota 5	5315854/7643309	Start lo 2018 Gas reflux Chest feel hot sometimes Pain in stomach, guts Sometimes difficulty in sv Continuous excessive bu	13/09/84
Mele Maat Village	7792817	Gas lo Bell Plante times after kkae s Kkae 2 plates kkae lo 1 n 5 years ilnis	10/10/1992
Anamburu	7544027	Few months now - bloati	30.07.1988
Nguna	7668234	Bel stap soa	10/12/1998



Results from Google sheet exported onto 40 Patients were prioritized and contacted to come forward for appointment at a clinic





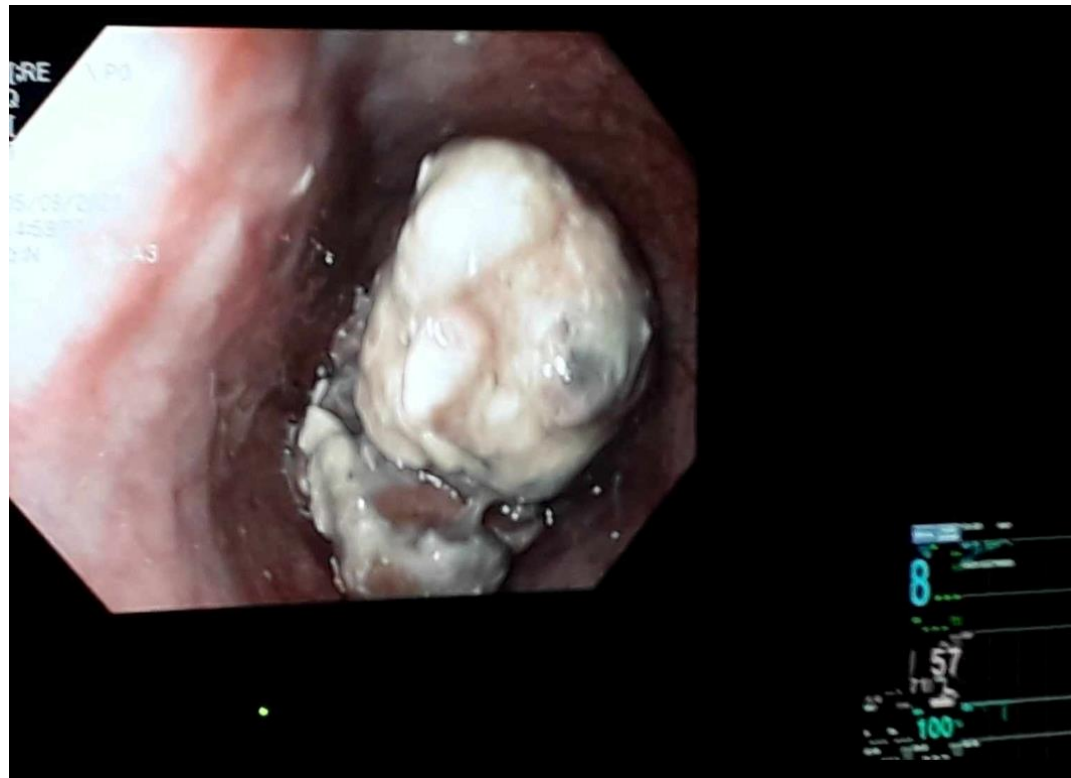
- 38 Ni-Vanuatu's had endoscopy done
- 4 cancers detected
- Clinical services delivery (visiting team) was maximized



CANCER OF THE COLON



CANCER OF THE ESOPHAGUS





DISCUSSIONS

Vanuatu needs better I.T solutions (to assist in health services delivery, especially during disaster time)

Low-tech and low-cost technology can be deployed during disaster time as well as business as usual

Mobile phone usage is widespread in Vanuatu

Internet coverage is widespread

Social media such as Facebook, messenger, Google documents & other apps can be utilized to recruit patients for a myriad of health purposes (clinical, surveillance, follow up etc) for service delivery in health.



RECOMMENDATIONS

1. A comprehensive, nationwide and holistic Health Information System is needed.
2. The MOH's ICT Unit needs more positions and specialized resources to maintain aforementioned H.I.S autonomously.



TANKYU TUMAS FOR YOUR TIME AND ATTENTION

