

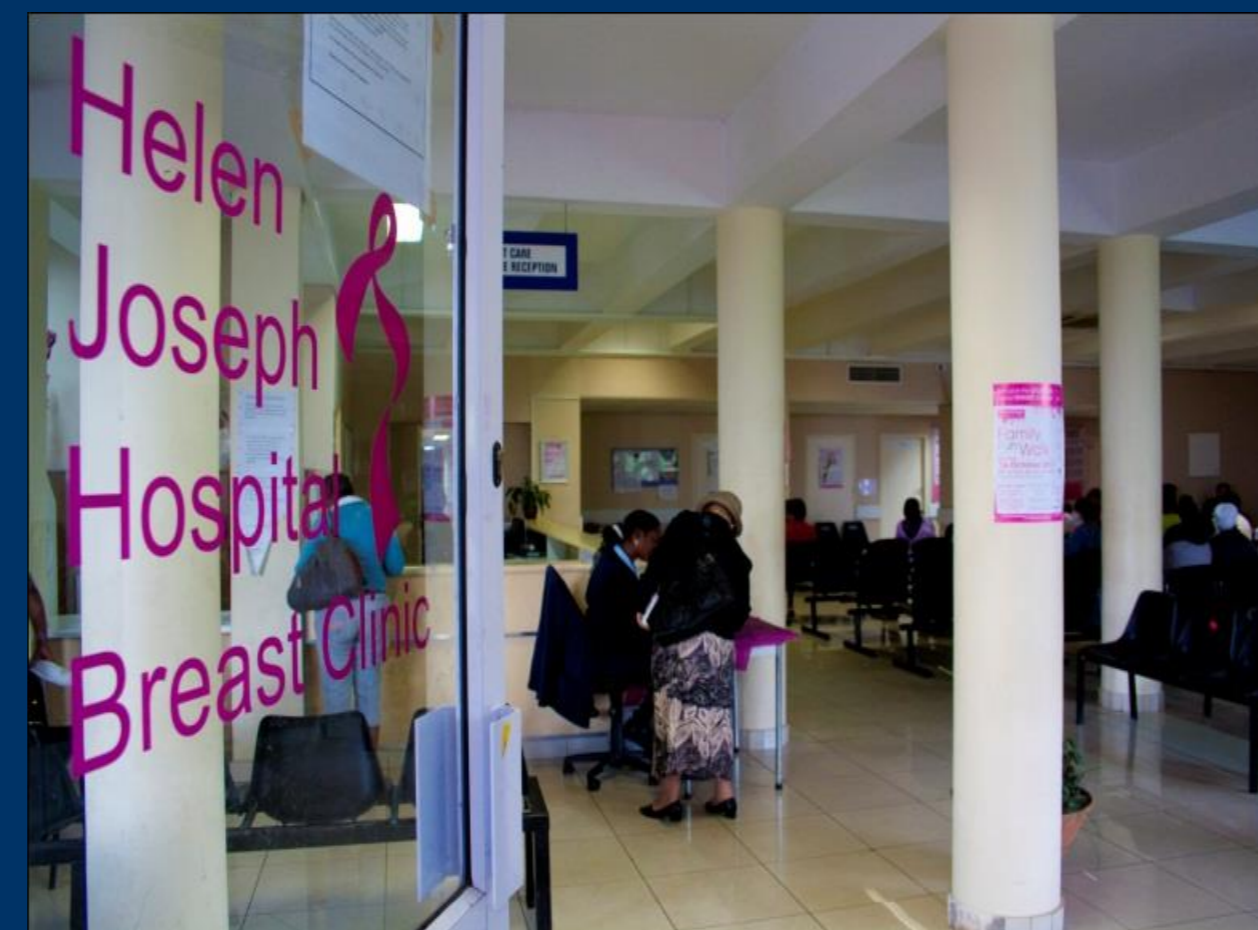
Knowledge of the Spectrum of Breast Disease Presenting at a Public, Tertiary Hospital in Johannesburg, South Africa is Critical to Ensuring Holistic Care

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BACKGROUND

- Breast cancer is ranked first among the top ten histologically diagnosed cancers in adult females in South Africa. HIV prevalence is 17.9% among adults aged 15-49 years.
- Most breast-related research focuses on cancer. It is critical to understand the total burden of breast diseases for service planning, especially in resource-constrained settings.
- The Breast Care Clinic (BCC) at Helen Joseph Hospital in Johannesburg, South Africa is one of few comprehensive breast care centers in Southern Africa



Breast Care Clinic

OBJECTIVE

To characterize the presentation and management of breast disease at a large, public hospital offering comprehensive breast-related services in Johannesburg, South Africa

METHODS

- We conducted a retrospective file review
- All men were included along with a systematic random sample of women
- Patients had to present for care at the Helen Joseph Hospital Breast Care Clinic, a public-sector facility located in Johannesburg South Africa, between April 2011 and June 2012
- Data were collected from the first visit through 12 months of follow-up

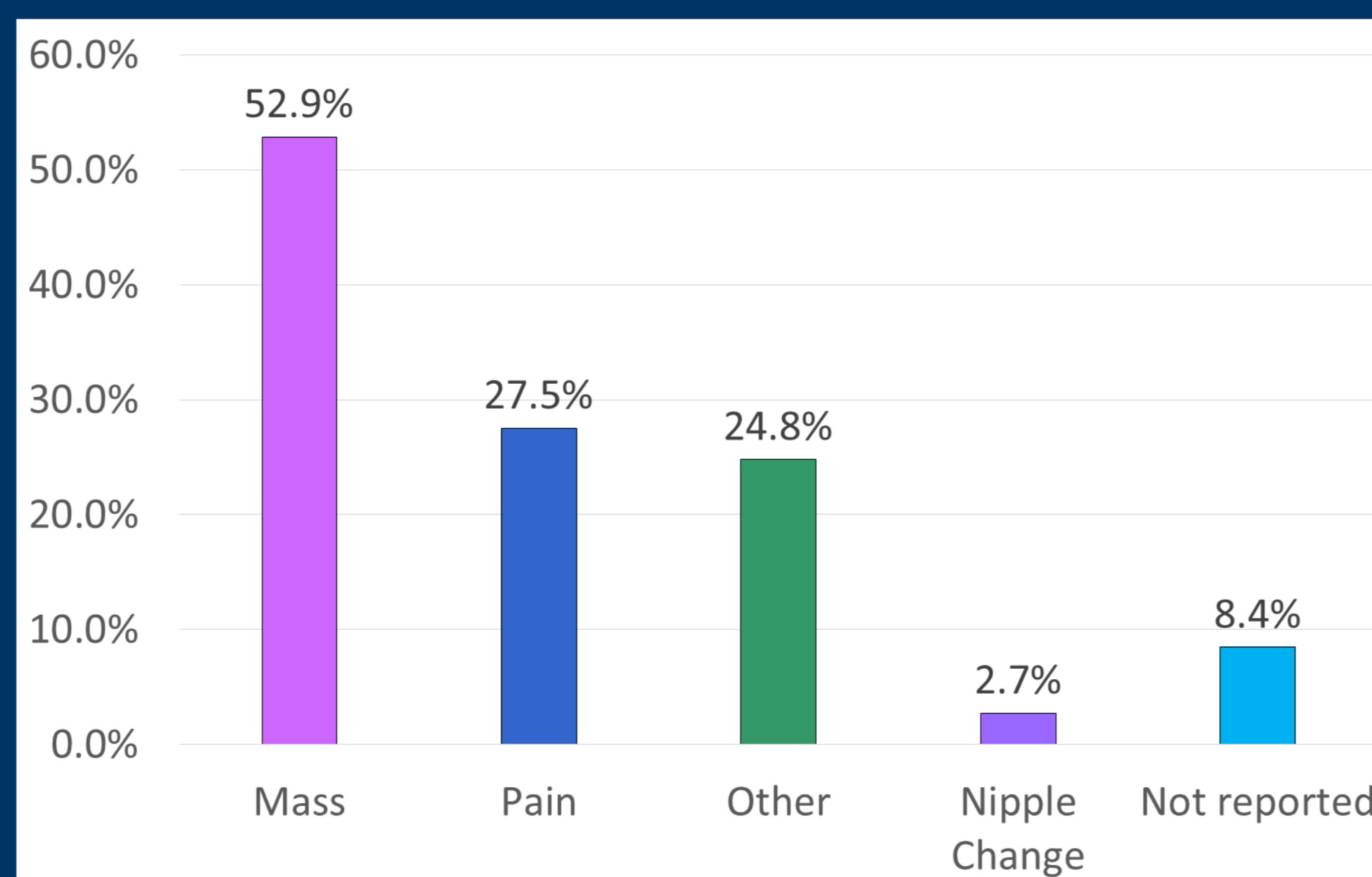
Statistical Methods

- Study data was collected and managed using REDCap electronic data capture tools hosted at the University of the Witwatersrand
- Baseline demographic and clinical characteristics, procedures performed, and final diagnoses are presented as:
 - Simple proportions for categorical variables
 - means with standard deviations (SD) or medians with corresponding interquartile ranges (IQR) for continuous variables
- Data analysis was conducted using SAS v. 9.3 (SAS Institute, Cary, NC)

RESULTS

- 4,836 individuals attended the clinic during the study period
- 367 patients (362 women) were included in the sample

Figure 1 – Presenting symptoms at the first physical exam



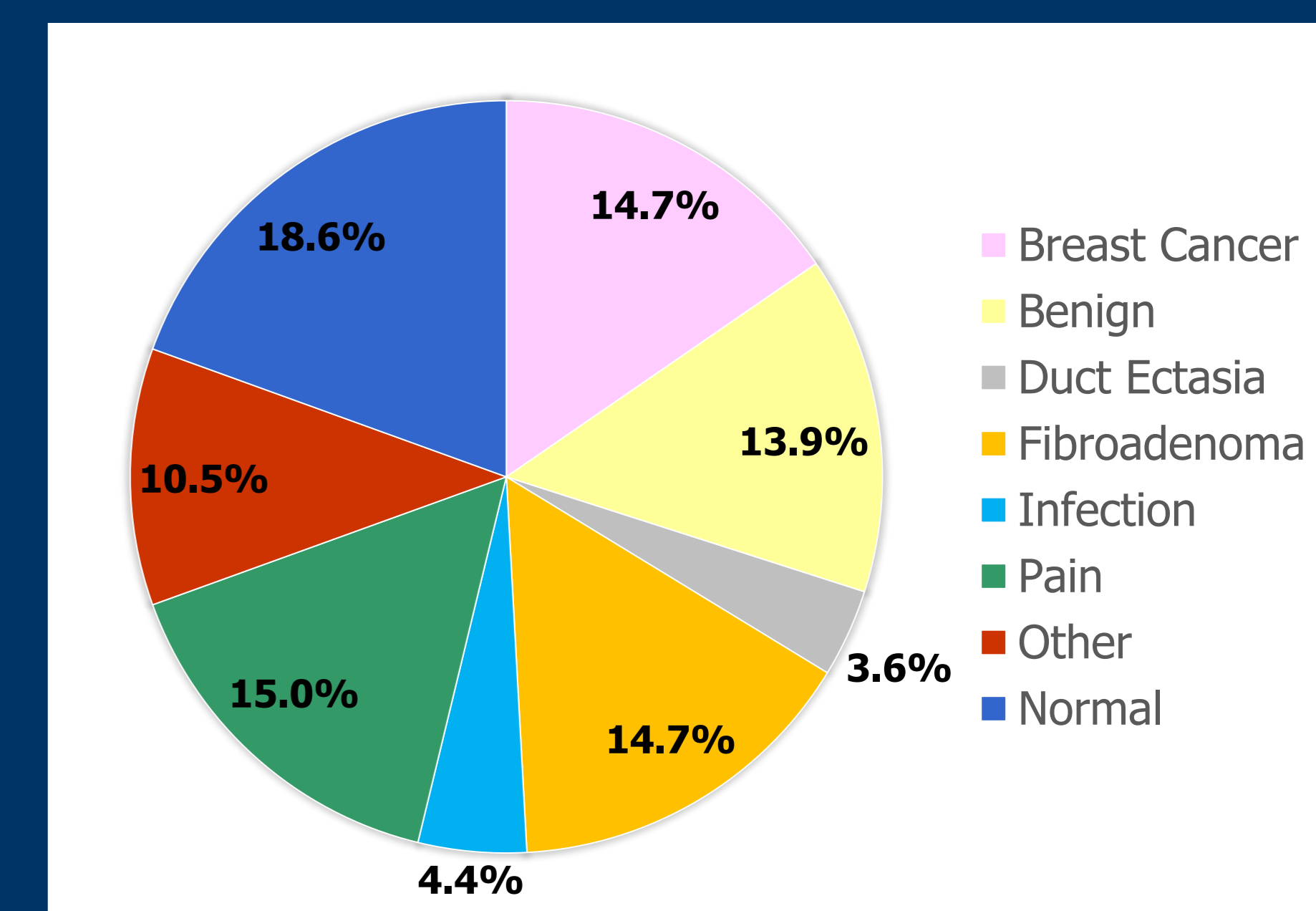
- The median (IQR) age at the first visit was 42.8 (30.4-54.9) years
- 69% of patients were African/Black and 9% had a recorded HIV-positive status
- A mass (53%) and/or pain (28%) in one or both breasts were the most common presenting symptoms
- Radiological assessment was requested in 75% of patients
- 25% and 17% of patients required histological and/or blood testing/diagnostics respectively

- 384 radiology tests were requested and results were found for 78% of requested tests
 - The most common finding was a mass/density (57%) followed by abnormal micro-calcification (6%)
- 125 histology tests were requested and results were found for 88% of requested tests
 - Invasive ductal cancer was diagnosed in 45% of the tests
 - Ductal carcinoma in-situ was found in 9% of the tests

Table 2 –Radiology and histology results

Radiology Results		N (%)
Total radiology tests conducted		384
Results available		300 (78.0%)
Mass		118 (39.3%)
Density		52 (17.3%)
Abnormal micro-calcification		18 (6.0%)
Architectural Distortion		11 (3.7%)
Normal		71 (23.7%)
Other		67 (22.3%)
Histology Results		N (%)
Total histology tests conducted		125
Results available		110 (88%)
Invasive ductal cancer		49 (45.0%)
Invasive lobular cancer		2 (1.8%)
Ductal carcinoma in-situ		10 (9.1%)
Fibroadenoma		8 (7.3%)
Papilloma		8 (9.1%)
Other		39 (35.5%)

Figure 2 – Final diagnoses



- Diagnoses were available for 361 patients and included:
 - Breast cancer (n=53; 14.7%)
 - Fibroadenoma (n=53; 14.7%)
 - Infection (n=16; 4.4%)
 - Other conditions (n=50; 13.9%)
- 4.7% of patients requested a breast augmentation, unrelated to a breast cancer diagnosis
- 60% of the men were diagnosed with gynecomastia
- Most patients (18.6%) had no detected abnormalities

CONCLUSIONS

Non-cancer related breast diagnoses far outweighed cancer diagnoses for this population. As breast cancer awareness increases due to media and health campaigns, facilities offering breast care must be prepared to manage an extensive range of non-cancer related conditions, as well as voluntary presentation for screening, in addition to their focus on cancer care.



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