

Suppl. Table I. Correlation matrix – items / genders

Masculine

Inter-Item Correlation Matrix

| | I31 | I32 | I33 | I34 | I35 | I36 | I37 | I38 | I39 | I40 | I41 | I42 | I43 | I44 | I45 | I46 | I47 | I48 | I49 | I50 | I51 | I52 | I53 | I54 | I56 | I57 |
|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| I31 | 1,000 | ,291 | ,092 | ,070 | ,176 | ,504 | ,055 | -,017 | -,286 | ,390 | -,282 | ,667 | ,225 | ,368 | ,303 | ,140 | ,247 | ,291 | ,184 | -,022 | ,184 | ,286 | ,391 | ,045 | -,092 | -,068 |
| I32 | ,291 | 1,000 | ,316 | -,299 | ,363 | -,173 | ,376 | ,116 | -,302 | ,640 | -,067 | ,216 | -,387 | ,000 | -,144 | -,096 | -,033 | ,700 | -,474 | -,076 | -,316 | -,378 | ,000 | -,155 | ,158 | -,435 |
| I33 | ,092 | ,316 | 1,000 | ,472 | ,574 | ,000 | ,297 | ,092 | ,120 | ,368 | -,211 | ,273 | ,000 | ,250 | ,227 | ,456 | ,361 | ,316 | ,000 | ,120 | ,125 | -,120 | ,000 | ,245 | ,125 | ,370 |
| I34 | ,070 | -,299 | ,472 | 1,000 | ,289 | ,621 | ,000 | ,278 | ,632 | -,348 | -,040 | ,207 | -,154 | ,000 | ,043 | ,115 | ,156 | ,239 | ,567 | ,361 | ,378 | ,452 | ,535 | ,000 | ,378 | ,400 |
| I35 | ,176 | ,363 | ,574 | ,289 | 1,000 | -,210 | ,644 | -,106 | ,046 | ,317 | -,384 | ,183 | ,156 | ,510 | ,239 | ,484 | ,513 | ,121 | -,128 | ,229 | ,383 | -,046 | ,090 | ,656 | -,191 | ,061 |
| I36 | ,504 | -,173 | ,000 | ,621 | -,210 | 1,000 | -,325 | ,303 | ,393 | -,101 | ,058 | ,524 | -,149 | -,183 | -,062 | -,166 | -,113 | ,346 | ,548 | ,131 | ,274 | ,393 | ,516 | -,447 | ,274 | -,058 |
| I37 | ,055 | ,376 | ,297 | ,000 | ,644 | -,325 | 1,000 | -,164 | -,213 | ,273 | ,283 | ,284 | ,081 | ,594 | ,641 | ,632 | ,797 | ,188 | -,594 | -,213 | ,297 | ,213 | ,140 | ,631 | ,000 | ,220 |
| I38 | -,017 | ,116 | ,092 | ,278 | -,106 | ,303 | -,164 | 1,000 | ,242 | -,017 | ,302 | ,365 | -,376 | ,000 | -,199 | -,084 | -,209 | ,291 | ,368 | ,506 | -,368 | -,242 | -,130 | -,316 | -,092 | ,049 |
| I39 | -,286 | -,302 | ,120 | ,632 | ,046 | ,393 | -,213 | ,242 | 1,000 | -,550 | ,088 | -,114 | -,098 | -,239 | -,258 | -,109 | -,271 | -,076 | ,239 | ,314 | ,239 | ,029 | ,169 | -,176 | ,239 | ,063 |
| I40 | ,390 | ,640 | ,368 | -,348 | ,317 | -,101 | ,273 | -,017 | -,550 | 1,000 | -,165 | ,516 | ,075 | ,184 | ,178 | ,252 | ,247 | ,291 | -,368 | -,286 | -,092 | -,506 | ,391 | ,045 | -,368 | -,418 |
| I41 | -,282 | -,067 | -,211 | -,040 | -,384 | ,058 | ,283 | ,302 | ,088 | -,165 | 1,000 | ,267 | -,043 | ,106 | ,366 | ,080 | ,251 | ,033 | -,423 | -,063 | ,053 | ,215 | ,075 | -,181 | ,211 | ,207 |
| I42 | ,667 | ,216 | ,273 | ,207 | ,183 | ,524 | ,284 | ,365 | -,114 | ,516 | ,267 | 1,000 | ,279 | ,547 | ,551 | ,478 | ,522 | ,216 | ,000 | ,082 | ,342 | ,114 | ,097 | ,100 | ,273 | ,079 |
| I43 | ,225 | -,387 | ,000 | -,154 | ,156 | -,149 | ,081 | -,376 | -,098 | ,075 | -,043 | ,279 | 1,000 | ,680 | ,603 | ,537 | ,505 | -,775 | -,136 | ,098 | ,612 | ,098 | -,192 | ,600 | -,612 | ,302 |
| I44 | ,368 | ,000 | ,250 | ,000 | ,510 | -,183 | ,594 | ,000 | -,239 | ,184 | ,106 | ,547 | ,680 | 1,000 | ,795 | ,810 | ,825 | -,316 | -,167 | ,239 | ,500 | ,239 | ,000 | ,816 | -,500 | ,529 |
| I45 | ,303 | -,144 | ,227 | ,043 | ,239 | -,062 | ,641 | -,199 | -,258 | -,178 | ,366 | ,551 | ,603 | ,795 | 1,000 | ,811 | ,926 | -,251 | -,341 | -,258 | ,454 | ,421 | ,080 | ,640 | -,227 | ,570 |
| I46 | ,140 | -,096 | ,456 | ,115 | ,484 | -,166 | ,632 | -,084 | -,109 | ,252 | ,080 | ,478 | ,537 | ,810 | ,811 | 1,000 | ,846 | -,288 | -,203 | -,109 | ,456 | ,109 | -,215 | ,819 | -,456 | ,562 |
| I47 | ,247 | -,033 | ,361 | ,156 | ,513 | -,113 | ,797 | -,209 | -,271 | ,247 | ,251 | ,522 | ,505 | ,825 | ,926 | ,846 | 1,000 | -,130 | -,309 | -,123 | ,567 | ,419 | ,146 | ,758 | -,206 | ,534 |
| I48 | ,291 | ,700 | ,316 | ,239 | ,121 | ,346 | ,188 | ,291 | ,076 | ,291 | ,033 | ,216 | -,775 | -,316 | -,251 | -,288 | -,130 | 1,000 | ,000 | -,076 | -,316 | ,076 | ,447 | -,465 | ,632 | -,234 |
| I49 | ,184 | -,474 | ,000 | ,567 | -,128 | -,548 | -,594 | ,368 | ,239 | -,368 | -,423 | ,000 | -,136 | -,167 | -,341 | -,203 | -,309 | ,000 | 1,000 | ,478 | ,000 | ,239 | ,236 | -,163 | ,000 | ,211 |
| I50 | -,022 | -,076 | ,120 | ,361 | ,229 | ,131 | -,213 | ,506 | ,314 | -,286 | -,063 | ,082 | ,098 | ,239 | -,258 | -,109 | -,123 | -,076 | ,478 | 1,000 | ,239 | ,029 | ,169 | ,059 | -,120 | ,215 |
| I51 | ,184 | -,316 | ,125 | ,378 | ,383 | ,274 | ,297 | -,368 | ,239 | -,092 | ,053 | ,342 | ,612 | ,500 | ,454 | ,456 | ,567 | -,316 | ,000 | ,239 | 1,000 | ,478 | ,354 | ,490 | -,125 | ,264 |
| I52 | ,286 | -,378 | -,120 | ,452 | -,046 | ,393 | ,213 | -,242 | ,029 | -,506 | ,215 | ,114 | ,098 | ,239 | ,421 | ,109 | ,419 | ,076 | ,239 | ,029 | ,478 | 1,000 | ,845 | ,176 | ,478 | ,543 |
| I53 | ,391 | ,000 | ,000 | ,535 | ,090 | ,516 | ,140 | -,130 | ,169 | -,391 | ,075 | ,097 | -,192 | ,000 | ,080 | -,215 | ,146 | ,447 | ,236 | ,169 | ,354 | ,845 | 1,000 | -,115 | ,707 | ,224 |
| I54 | ,045 | -,155 | ,245 | ,000 | ,656 | -,447 | ,631 | -,316 | -,176 | ,045 | -,181 | ,100 | ,600 | ,816 | ,640 | ,819 | ,758 | -,465 | -,163 | ,059 | ,490 | ,176 | -,115 | 1,000 | -,490 | ,492 |
| I56 | -,092 | ,158 | ,125 | ,378 | -,191 | ,274 | ,000 | -,092 | ,239 | -,368 | -,211 | -,273 | -,612 | -,500 | -,227 | -,456 | -,206 | ,632 | ,000 | -,120 | -,125 | ,478 | ,707 | -,490 | 1,000 | ,106 |
| I57 | -,068 | -,435 | ,370 | ,400 | ,061 | -,058 | ,220 | ,049 | ,063 | -,368 | ,207 | ,079 | ,302 | ,529 | ,570 | ,562 | ,534 | -,234 | ,211 | ,215 | ,264 | ,543 | ,224 | ,492 | ,106 | 1,000 |

The covariance matrix is calculated and used in the analysis.

Inter-Item Correlation Matrix

| | I31 | I32 | I33 | I34 | I35 | I36 | I37 | I38 | I39 | I40 | I41 | I42 | I43 | I44 | I45 | I46 | I47 | I48 | I49 | I50 | I51 | I52 | I53 | I54 | I58 ▶ | I59 |
|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| I31 | 1,000 | ,141 | ,311 | ,136 | ,187 | ,040 | -,329 | ,330 | ,307 | -,158 | ,128 | -,173 | ,136 | ,304 | ,459 | ,581 | ,496 | ,073 | -,281 | -,120 | -,070 | -,120 | ,126 | ,141 | ,213 | -,077 |
| I32 | ,141 | 1,000 | ,151 | -,247 | -,262 | ,281 | ,087 | -,160 | ,061 | -,455 | -,425 | -,600 | -,186 | ,031 | -,122 | -,148 | -,166 | ,143 | ,452 | -,087 | -,193 | -,233 | -,061 | ,017 | -,151 | -,305 |
| I33 | ,311 | ,151 | 1,000 | ,596 | ,225 | ,388 | ,192 | ,353 | ,522 | ,117 | ,069 | ,348 | ,358 | ,326 | ,537 | ,563 | ,599 | -,236 | ,348 | ,385 | ,225 | ,385 | ,522 | ,453 | ,000 | ,339 |
| I34 | ,136 | -,247 | ,596 | 1,000 | ,654 | ,787 | ,161 | ,547 | ,671 | ,498 | ,172 | ,472 | ,479 | ,364 | ,656 | ,718 | ,785 | -,112 | ,141 | ,298 | ,332 | ,298 | ,256 | ,392 | ,267 | ,699 |
| I35 | ,187 | -,262 | ,225 | ,654 | 1,000 | ,671 | ,152 | ,717 | ,667 | ,361 | ,046 | ,251 | ,385 | ,395 | ,393 | ,461 | ,574 | ,159 | -,141 | ,174 | ,271 | ,174 | ,144 | ,179 | ,463 | ,699 |
| I36 | ,040 | -,281 | ,388 | ,787 | ,671 | 1,000 | ,274 | ,738 | ,533 | ,510 | ,381 | ,549 | ,530 | ,342 | ,573 | ,572 | ,491 | -,061 | ,189 | ,100 | ,302 | ,349 | ,233 | ,322 | ,387 | ,753 |
| I37 | -,329 | ,087 | ,192 | ,161 | ,152 | ,274 | 1,000 | ,204 | ,134 | ,090 | ,178 | ,361 | ,620 | ,360 | ,252 | ,017 | ,187 | ,578 | ,662 | ,528 | ,608 | ,528 | ,302 | ,686 | -,108 | ,300 |
| I38 | ,330 | -,160 | ,353 | ,547 | ,717 | ,738 | ,204 | 1,000 | ,325 | ,514 | ,218 | ,389 | ,487 | ,372 | ,427 | ,462 | ,468 | ,036 | ,074 | -,058 | ,080 | ,087 | ,149 | ,240 | ,433 | ,544 |
| I39 | ,307 | -,061 | ,522 | ,671 | ,667 | ,533 | ,134 | ,325 | 1,000 | -,075 | ,203 | ,230 | ,325 | ,315 | ,631 | ,728 | ,729 | -,123 | -,012 | ,536 | ,510 | ,536 | ,394 | ,453 | ,130 | ,681 |
| I40 | -,158 | -,455 | ,117 | ,498 | ,361 | ,510 | ,090 | ,514 | -,075 | 1,000 | ,136 | ,480 | ,265 | ,038 | ,031 | ,038 | ,140 | ,055 | -,008 | -,203 | -,097 | -,090 | -,075 | ,040 | ,379 | ,326 |
| I41 | ,128 | -,425 | ,069 | ,172 | ,046 | ,381 | ,178 | ,218 | ,203 | ,136 | 1,000 | ,671 | ,335 | ,079 | ,304 | ,323 | ,174 | -,315 | -,043 | ,020 | ,263 | ,514 | ,322 | ,326 | ,077 | ,367 |
| I42 | -,173 | -,600 | ,348 | ,472 | ,251 | ,549 | ,361 | ,389 | ,230 | ,480 | ,671 | 1,000 | ,555 | ,192 | ,266 | ,254 | ,302 | -,516 | ,130 | ,241 | ,376 | ,542 | ,230 | ,484 | ,026 | ,628 |
| I43 | ,136 | -,186 | ,358 | ,479 | ,385 | ,530 | ,620 | ,487 | ,325 | ,265 | ,335 | ,555 | 1,000 | ,753 | ,576 | ,400 | ,488 | -,393 | ,472 | ,298 | ,600 | ,528 | ,325 | ,797 | ,119 | ,564 |
| I44 | ,304 | ,031 | ,326 | ,364 | ,395 | ,342 | ,360 | ,372 | ,315 | ,038 | ,079 | ,192 | ,753 | 1,000 | ,454 | ,314 | ,470 | -,147 | ,315 | ,068 | ,408 | ,154 | ,108 | ,524 | ,210 | ,457 |
| I45 | ,459 | -,122 | ,537 | ,656 | ,393 | ,573 | ,252 | ,427 | ,631 | ,031 | ,304 | ,266 | ,576 | ,454 | 1,000 | ,932 | ,844 | -,261 | ,266 | ,523 | ,590 | ,523 | ,514 | ,638 | ,276 | ,492 |
| I46 | ,581 | -,148 | ,563 | ,718 | ,461 | ,572 | ,017 | ,462 | ,728 | ,038 | ,323 | ,254 | ,400 | ,314 | ,932 | 1,000 | ,870 | -,147 | ,006 | ,411 | ,408 | ,411 | ,418 | ,473 | ,321 | ,497 |
| I47 | ,496 | -,166 | ,599 | ,785 | ,574 | ,491 | ,187 | ,468 | ,729 | ,140 | ,174 | ,302 | ,488 | ,470 | ,844 | ,870 | 1,000 | -,282 | ,094 | ,533 | ,495 | ,389 | ,382 | ,559 | ,158 | ,535 |
| I48 | ,073 | ,143 | -,236 | -,112 | ,159 | -,061 | -,578 | ,036 | -,123 | ,055 | -,315 | -,516 | -,393 | -,147 | -,261 | -,147 | -,282 | 1,000 | -,393 | -,612 | -,691 | -,442 | -,123 | -,681 | ,484 | -,176 |
| I49 | -,281 | ,452 | ,348 | ,141 | -,141 | ,189 | ,662 | ,074 | -,012 | -,008 | -,043 | ,130 | ,472 | ,315 | ,266 | ,006 | ,094 | -,393 | 1,000 | ,341 | ,455 | ,341 | ,230 | ,602 | -,299 | ,156 |
| I50 | -,120 | -,087 | ,385 | ,298 | ,174 | ,100 | ,528 | -,058 | ,536 | -,203 | ,020 | ,241 | ,298 | ,068 | ,523 | ,411 | ,533 | -,612 | ,341 | 1,000 | ,803 | ,722 | ,536 | ,621 | -,252 | ,353 |
| I51 | -,070 | -,193 | ,225 | ,332 | ,271 | ,302 | ,608 | ,080 | ,510 | -,097 | ,263 | ,376 | ,600 | ,408 | ,590 | ,408 | ,495 | -,691 | ,455 | ,803 | 1,000 | ,694 | ,379 | ,779 | -,183 | ,526 |
| I52 | -,120 | -,233 | ,385 | ,298 | ,174 | ,349 | ,528 | ,087 | ,536 | -,090 | ,514 | ,542 | ,528 | ,154 | ,523 | ,411 | ,389 | -,442 | ,341 | ,722 | ,694 | 1,000 | ,704 | ,621 | -,162 | ,549 |
| I53 | ,126 | -,061 | ,522 | ,256 | ,144 | ,233 | ,302 | ,149 | ,394 | -,075 | ,322 | ,230 | ,325 | ,108 | ,514 | ,418 | ,382 | -,123 | ,230 | ,536 | ,379 | ,704 | 1,000 | ,355 | ,022 | ,209 |
| I54 | ,141 | ,017 | ,453 | ,392 | ,179 | ,322 | ,686 | ,240 | ,453 | ,040 | ,326 | ,484 | ,797 | ,524 | ,638 | ,473 | ,559 | -,681 | ,602 | ,621 | ,779 | ,621 | ,355 | 1,000 | -,074 | ,469 |
| I55 | ,213 | -,151 | ,000 | ,267 | ,463 | ,387 | -,108 | ,433 | ,130 | ,379 | ,077 | ,026 | ,119 | ,210 | ,276 | ,321 | ,158 | ,484 | -,299 | -,252 | -,183 | -,162 | ,022 | -,074 | 1,000 | ,313 |
| I57 | -,077 | -,305 | ,339 | ,699 | ,699 | ,753 | ,300 | ,544 | ,681 | ,326 | ,367 | ,628 | ,564 | ,457 | ,492 | ,497 | ,535 | ,178 | ,156 | ,353 | ,526 | ,549 | ,209 | ,469 | ,313 | ,1,000 |

| | | | | | | | | | | | | |
|----|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|-------|-------|--------------|---|
| SB | 0.781 | 0.640 | 0.561 | 0.601 | 0.139 | 0.509 | 1 | | | | | |
| SS | 0.824 | 0.483 | 0.038 | 0.007 | 0.010 | 0.003 | 0.064 | 1 | | | | |
| SM | 0.934 | 0.027 | 0.044 | 0.001 | 0.003 | 0.009 | 0.522 | 0.001 | 1 | | | |
| GU | 0.888 | 0.034 | 0.365 | 0.084 | 0.149 | 0.393 | 0.278 | 0.148 | 0.235 | 1 | | |
| PP | 0.003 | 0.349 | 0.332 | 0.066 | 0.055 | 0.142 | 0.021 | 0.047 | 0.066 | 0.931 | 1 | |
| PG | 0.050 | 0.011 | 0.129 | 0.017 | 0.235 | 0.021 | 0.050 | 0.030 | 0.213 | 0.117 | 0.037 | 1 |

Suppl. table III. Correlation matrix – emotional functioning scale

| | I43 | I44 | I45 | I46 | I47 |
|-----|--------------|--------------|--------------|--------------|-----|
| I43 | 1 | | | | |
| I44 | 0.001 | 1 | | | |
| I45 | 0.001 | 0.033 | 1 | | |
| I46 | 0.004 | 0.042 | 0.001 | 1 | |
| I47 | 0.001 | 0.001 | 0.001 | 0.001 | 1 |

Suppl. table IV. Correlation matrix – physical functioning scale

| | I49 | I50 | I51 | I52 | I53 | I54 | I56 | I57 | I58 | I59 |
|-----|--------------|--------------|--------------|--------------|--------------|-------|-------|-----|-------|-----|
| I49 | 1 | | | | | | | | | |
| I50 | 0.035 | 1 | | | | | | | | |
| I51 | 0.295 | 0.001 | 1 | | | | | | | |
| I52 | 0.062 | 0.024 | 0.001 | 1 | | | | | | |
| I53 | 0.075 | 0.047 | 0.076 | 0.001 | 1 | | | | | |
| I54 | 0.062 | 0.018 | 0.001 | 0.042 | 0.014 | 1 | | | | |
| I56 | 1.000 | 0.680 | 0.661 | 0.094 | 0.006 | 0.072 | 1 | | | |
| I57 | 0.460 | 0.558 | 0.282 | 0.184 | 0.493 | 0.263 | 0.242 | 1 | | |
| I58 | 0.385 | 0.589 | 0.228 | 0.537 | 0.335 | 0.639 | - | - | 1 | |
| I59 | 0.363 | 0.133 | 0.063 | 0.156 | 0.319 | 0.199 | - | - | 0.096 | 1 |

STROBE Statement—Checklist of items that should be included in reports of *cross-sectional studies*

| | Item No | Recommendation |
|---------------------------|---------|---|
| Title and abstract | | |
| | 1 | <p>(a) Indicate the study's design with a commonly used term in the title or the abstract</p> <p><i>The Quality of Life of Patients with Hereditary Nonpolyposis Colorectal Cancer Undergoing Preoperative Chemoradiation</i></p> <hr/> <p>(b) Provide in the abstract an informative and balanced summary of what was done and what was found</p> <p><i>Materials and methods. The cross-sectional, single-center study was performed on a group of 32 patients with genetic risk of colorectal cancer, who underwent preoperative chemoradiation and surgery. Results. The series of values for the scores on the symptom scale varied between 15 and 30, and the average level of symptom scores did not differ significantly between the genders (22.0 vs 22.75; $p = 0.636$), highlighting a moderate impairment of quality of life QoL. Scores for the emotional functioning scale were significantly lower in men (10.33 vs 13.25; $p = 0.049$), as were the scores for the physical functions (15.67 vs 19.15; $p = 0.039$), showing a decrease of quality of life QoL. Conclusions. The overall score showed an average quality of life QoL in patients with colorectal cancer with genetic risk, highlighting significant differences in psycho-emotional functioning between women and men.</i></p> |
| Introduction | | |
| Background/rationale | 2 | <p>Explain the scientific background and rationale for the investigation being reported</p> <p><i>CRC can be hereditary in 3% of patients, with an onset at younger ages as various genetic syndromes [2, 3]. The increasing incidence of CRC emphasized the studying of quality of life (QoL) in patients undergoing oncological and surgical therapies. Recent studies have shown that path_MLH1 and path_MSH2 carriers have a lifetime risk of CRC of approximately 50% and this incidence could not be decreased by surveillance colonoscopy.</i></p> |
| Objectives | 3 | <p>State specific objectives, including any prespecified hypotheses</p> <p><i>The study aim was to evaluate the QoL of patients with colorectal cancer with genetic risk who underwent preoperative cancer treatment (chemoradiation) and then underwent surgery, using an official questionnaire translated into Romanian.</i></p> |
| Methods | | |
| Study design | 4 | Present key elements of study design early in the paper |

The cross-sectional study

| | | |
|------------------------------|----|---|
| Setting | 5 | <p>Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection</p> <p>The cross-sectional study was conducted between November 2019 and March 2020 and interrupted temporarily due to the COVID-19 pandemic lockdown in Romania on March, 16th, 2020. The study was carried out at Regional Institute of Oncology, Iasi, Romania. The genetic risk was analyzed based on the genetic tree and the Amsterdam criteria by oncogenetics specialists.</p> |
| Participants | 6 | <p>(a) Give the eligibility criteria, and the sources and methods of selection of participants</p> <p>The inclusion criteria in the study were: patients over 18 years of age, without cognitive disorders, with unaltered judgment and introspection capacity, having awareness of oncological disease, with oncological diagnosis and genetic risk. All patients who were asked to answer the questionnaire, after basic information of the study, gave their informed consent and filled in the QoL assessment questionnaire. The exclusion criteria were: patients with oncological diagnosis but without a genetic risk, those in the stage of denial of the oncological disease, confused or disoriented, and those with problems in understanding the instructions to fill in the questionnaire.</p> |
| Variables | 7 | <p>Clearly define all outcomes, exposures, predictors, potential confounders, and effect modifiers. Give diagnostic criteria, if applicable</p> <p>The study was conducted in accordance with the Helsinki Declaration and with several published principles</p> <p>Study participants were patients with CRC with a genetic risk and chemoradiation undergoing first post-surgery monitoring</p> <p>Independent variables: sex (gender), age</p> <p>Dependent variables: QoL scale - overall functioning, QoL scale - physical functioning, QoL scale - emotional functioning</p> |
| Data sources/ measurement | 8* | <p>For each variable of interest, give sources of data and details of methods of assessment (measurement). Describe comparability of assessment methods if there is more than one group</p> <p>Participants were selected taking into account the inclusion criteria, one of the members of the study team, specialist in Oncogenetics, being directly involved in identifying patients at genetic risk of cancer. Data for independent variables were obtained from the anamnesis, and data for dependent variables were obtained from the analysis of questionnaires filled in by participants</p> |
| Bias | 9 | Describe any efforts to address potential sources of bias |

A potential source of bias could be the socially desirable responses from participants and to avoid this situation, the oncologic psychologist explained to participants that there were no right or wrong answers, and, no matter what answers they chose, there were no negative consequences in terms of regarding the collaboration with the physicians or the subsequent treatments.

| | | |
|------------------------|----|--|
| Study size | 10 | <p>Explain how the study size was arrived at</p> <p>The cross-sectional study was conducted between November 2019 and March 2020 and interrupted temporarily due to the COVID-19 pandemic lockdown in Romania on March, 16th, 2020</p> |
| Quantitative variables | 11 | <p>Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why</p> <p>Tables.</p> |
| Statistical methods | 12 | <p>(a) Describe all statistical methods, including those used to control for confounding</p> <p>Descriptive statistics. Kruskal-Wallis significance tests, ANOVA</p> <p>(b) Describe any methods used to examine subgroups and interactions</p> <p>Descriptive statistics.</p> <p>(c) Explain how missing data were addressed</p> <p>N/A</p> <p>(d) If applicable, describe analytical methods taking account of sampling strategy</p> <p>N/A</p> <p>(e) Describe any sensitivity analyses</p> <p>The Cronbach's alpha coefficient =0.819, respectively 0.90, taking into account a statistically significant threshold < 0.05.</p> |

Results

| | | |
|--------------|-----|--|
| Participants | 13* | <p>(a) Report numbers of individuals at each stage of study—eg numbers potentially eligible, examined for eligibility, confirmed eligible, included in the study, completing follow-up, and analysed</p> <p>The study group consisted of 32 patients who freely consented to participate in the research.</p> <p>(b) Give reasons for non-participation at each stage</p> <p>The exclusion criteria were: patients with oncological diagnosis but without a genetic risk, those in the stage of denial of the oncological disease, confused or disoriented, and those with problems in understanding the instructions to fill in the questionnaire.</p> <p>(c) Consider use of a flow diagram</p> <p>N/A</p> |
|--------------|-----|--|

| | | |
|-------------------|-----|---|
| Descriptive data | 14* | <p>(a) Give characteristics of study participants (eg demographic, clinical, social) and information on exposures and potential confounders</p> <p>Table 1.</p> <hr/> <p>(b) Indicate number of participants with missing data for each variable of interest</p> <p>N/A</p> |
| Outcome data | 15* | <p>Report numbers of outcome events or summary measures</p> <p>N/A</p> |
| Main results | 16 | <p>(a) Give unadjusted estimates and, if applicable, confounder-adjusted estimates and their precision (eg, 95% confidence interval). Make clear which confounders were adjusted for and why they were included</p> <p>N/A</p> <hr/> <p>(b) Report category boundaries when continuous variables were categorized</p> <p>They are reported within the limits of the study in Tables 1, 3, 5, 7, and 8.</p> <hr/> <p>(c) If relevant, consider translating estimates of relative risk into absolute risk for a meaningful time period</p> <p>N/A</p> |
| Other analyses | 17 | <p>Report other analyses done – eg. analyses of subgroups and interactions, and sensitivity analyses</p> <p>Male / female subgroups, age / correlations between variables were analysed.</p> |
| Discussion | | |
| Key results | 18 | <p>Summarise key results with reference to study objectives</p> <p>The main statements of our study are the following: the average level of scores for symptoms did not differ significantly between the sexes, highlighting a moderate impairment of quality of life QoL. Men did not feel less masculine, while women felt less feminine as a result of illness and treatment; the correlation matrix of items for emotional function showed strong correlations, statistically significant between the patient's concerns for future health, weight, feelings of dissatisfaction with attractiveness, femininity / masculinity and, generally, with their own body; the symptoms characteristic of discomfort caused by the colostomy bag or unintentional manifestations generated by bowel movement showed correlations that led the patient to reanalyze his/her physical and emotional effects, and greater impairment of physical and emotional functions was noted in men.</p> |

| | | |
|------------------|----|--|
| Limitations | 19 | <p>Discuss limitations of the study, taking into account sources of potential bias or imprecision. Discuss both direction and magnitude of any potential bias</p> <p>The limitations of the QoL studies in patients with CRC could be the lack of accumulation of information by systematic reviews and the lack of a gold standard for QoL measurement. Other limitations of such studies could be due to poor data acquisition, low response rates, a reduced sample size, and different ways of correcting the confounding factors. The role of chemoradiation has been little investigated in patients with a colostomy for CRC. In the context of several limitations, we considered that the QoL studies would be useful to understand the factors influencing the QoL of patients with colorectal cancer, especially when diagnosed at younger ages.</p> |
| Interpretation | 20 | <p>Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of analyses, results from similar studies, and other relevant evidence</p> <p>The overall score of QoL showed an average QoL level in patients with CRC with genetic risk treated by chemoradiation, at the first postoperative monitoring, highlighting significant differences in psycho-emotional functioning between women and men, data comparable with the results of other studies with same research purposes.</p> |
| Generalisability | 21 | <p>Discuss the generalisability (external validity) of the study results</p> <p>The strengths of the present study refer to a group of patients with Lynch syndrome who are young patients, socially active, for who to maintain a high level of QoL is extremely important even after the oncological therapeutic interventions. The weaknesses of our study refer to the small group, few demographic variables and the non-inclusion in the statistical evaluation of the histopathological and surgical data. The same team of researchers from our university intends to continue the study on larger groups of patients, in order to better conclude the results and extrapolate the conclusions in the hospital management, population awareness and patients' information, as well as for future projects of other research teams.</p> <p>The research should use properly validated tools in large-scale studies for a better data comparison. The result of such studies might be useful for oncologists, surgeons, psychologists, and pharmacologists, to choose the best therapy protocols to increase QoL in patients diagnosed with CRC at young ages.</p> |

Other information

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| Funding | 22 | Give the source of funding and the role of the funders for the present study and, if applicable, for the original study on which the present article is based |
| | | This research received no external funding. |

*Give information separately for exposed and unexposed groups.

Note: An Explanation and Elaboration article discusses each checklist item and gives methodological background and published examples of transparent reporting. The STROBE checklist is best used in conjunction with this article (freely available on the Web sites of PLoS Medicine at <http://www.plosmedicine.org/>, Annals of Internal Medicine at <http://www.annals.org/>, and Epidemiology at <http://www.epidem.com/>). Information on the STROBE Initiative is available at www.strobe-statement.org.